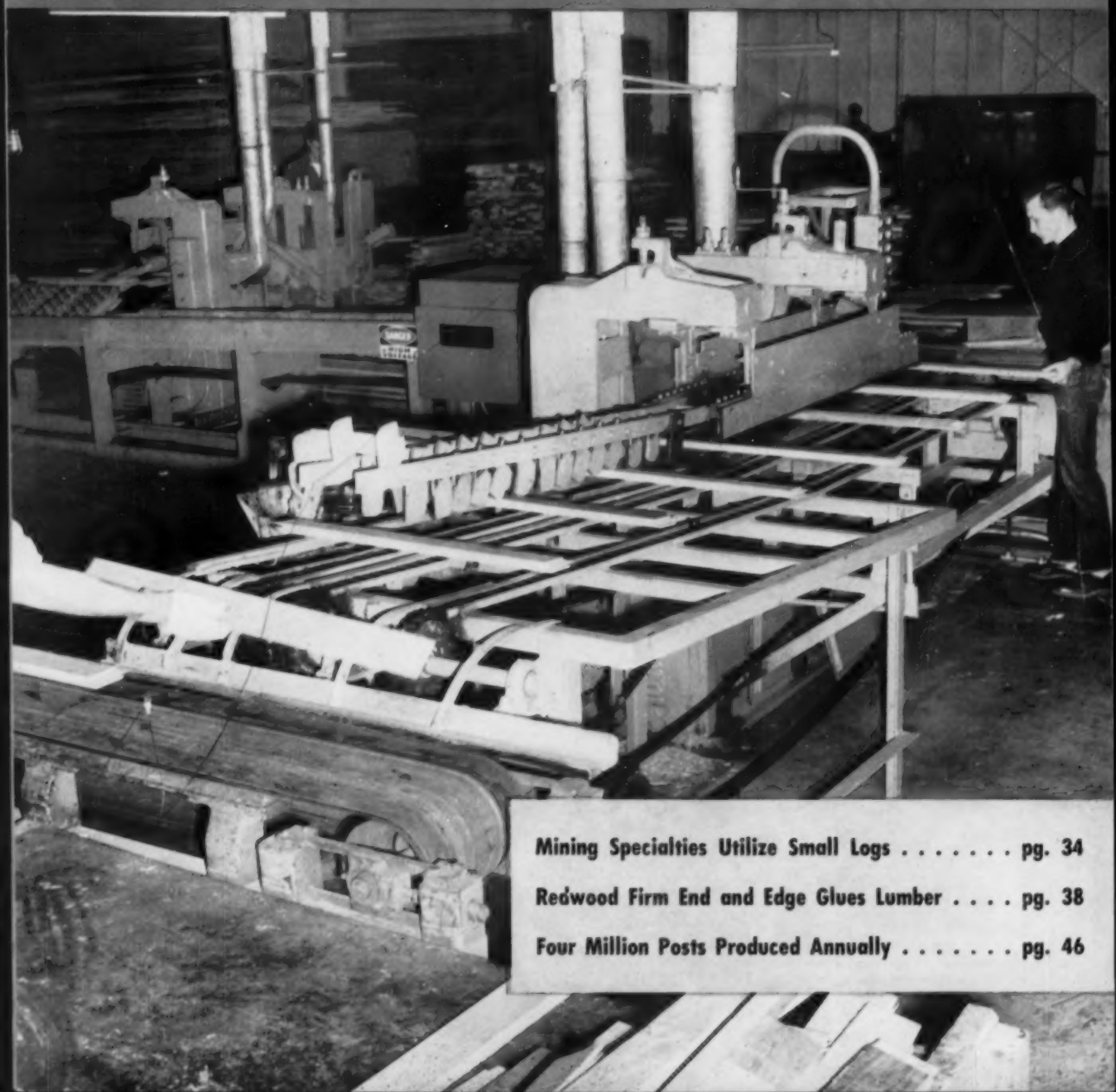
JULY 12, 1957

THE Lumberman

LUMBER PLYWOOD BOARD WOOD MANUFACTURING



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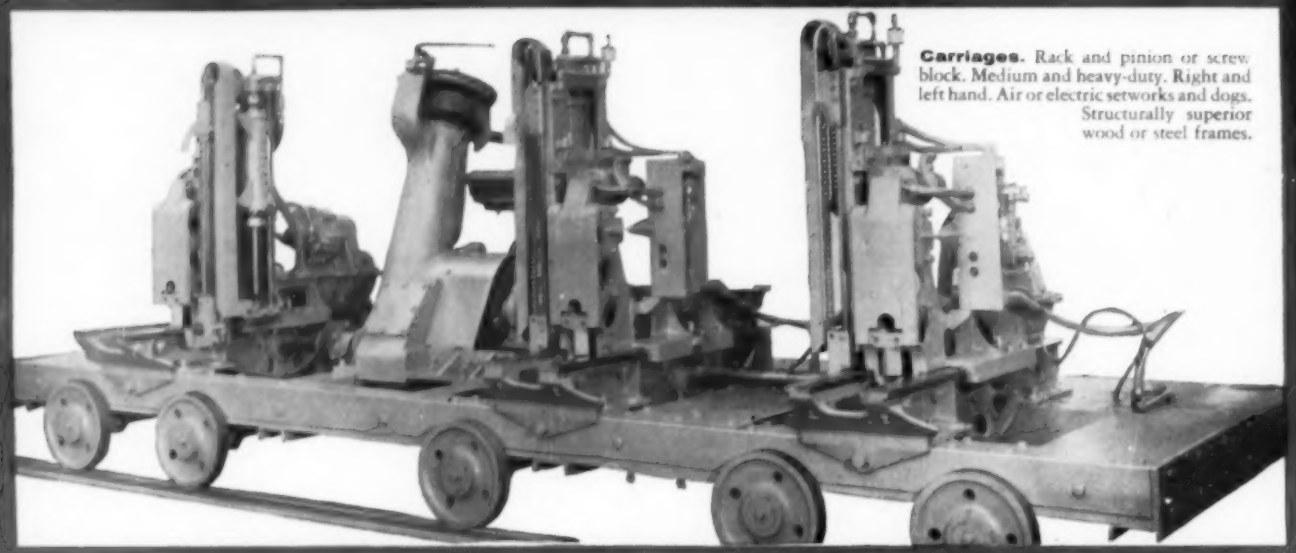

Carriages. Rack and pinion or screw block. Medium and heavy-duty. Right and left hand. Air or electric setworks and dogs. Structurally superior wood or steel frames.

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Production Per Man Hour	*Man-Power Required*
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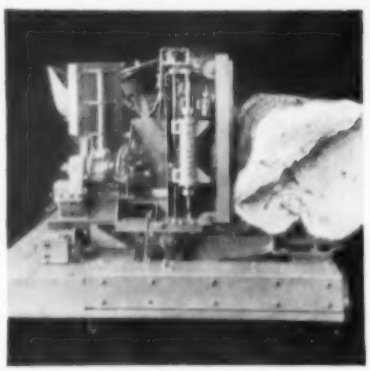
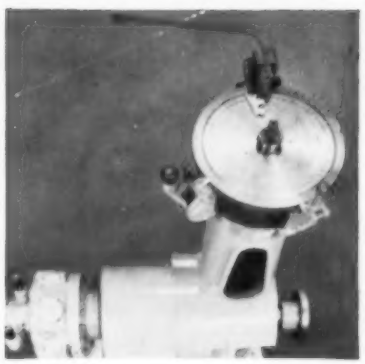


Power Dogs. Air or electric. Plain or quarter sawing. For all sizes and makes of rack and pinion or screw block carriages. Positive action — no slipping — easy log handling.



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TRAXCAVATOR*

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The new No. 933

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THE COMPLETE LINE OF TOUGH CAT-BUILT TRAXCAVATORS

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Flywheel HP at sea level	100	70	50
Bucket capacity, cu. yd.	2¼	1½	1
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Planing Mill, housed in an L shape Soulé Building, 40′ x 120′.

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July 12, 1957

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Publisher and General Manager

THE Lumberman

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PUBLISHING OFFICES
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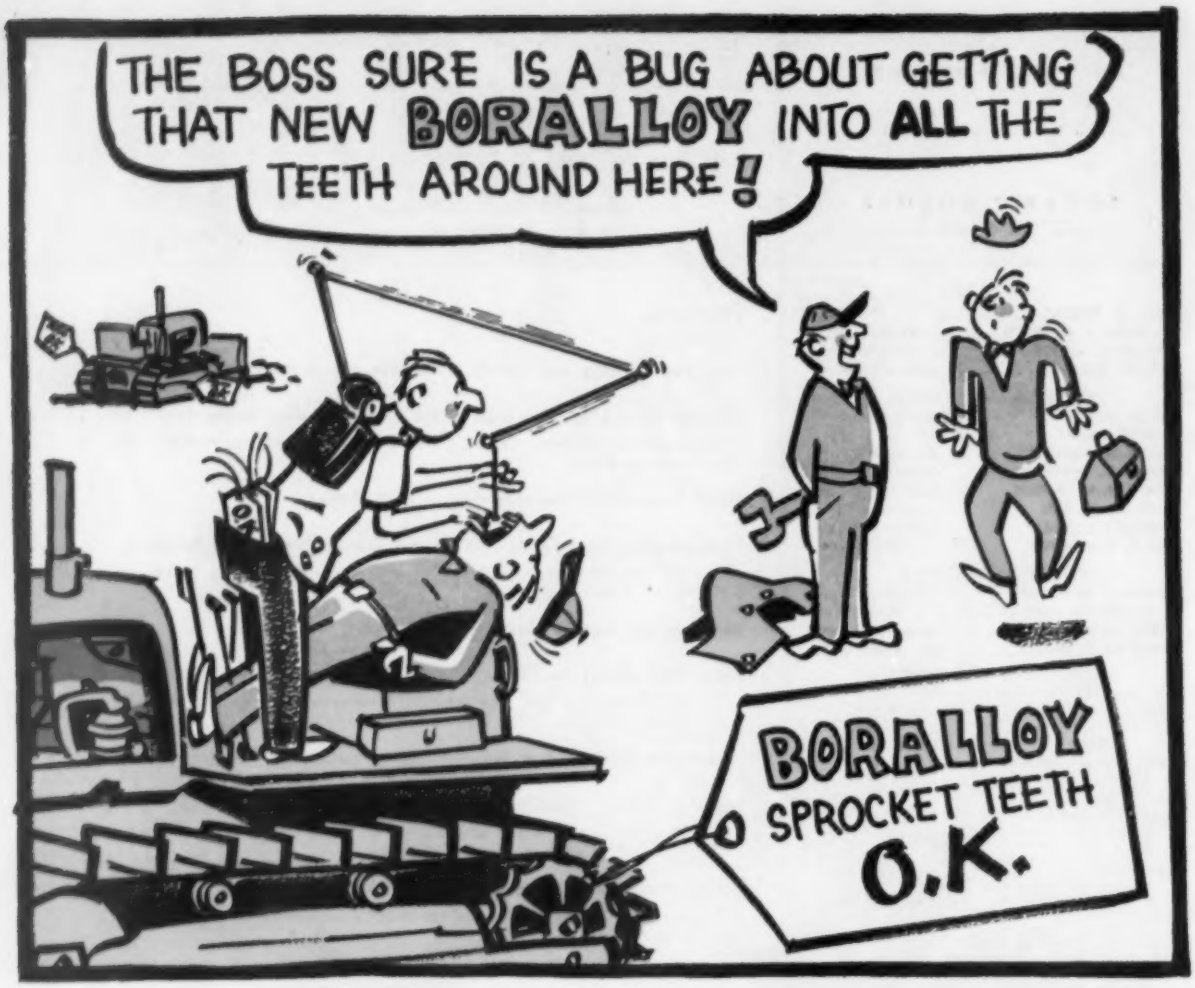

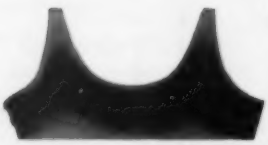

It increases sprocket life 50 to 100%! Got the name?—*Boralloy*. It's a new alloy which Caterpillar uses to make sprockets and replacement rims. It permits a minimum of 61% deeper hardening.

Result: CAT* BORALLOY sprocket teeth hold their contour longer. Teeth and track bushings *stay* in proper mesh, reducing wear and tear on all track running gear. Don't take chances. Get parts you can trust — see your Caterpillar Dealer today! Where else can you get the long-life benefits of Boralloy?

Caterpillar Tractor Co., San Francisco, Calif.; Peoria, Ill., U. S. A.

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Our Cover Picture

EDGE AND END-GLUING processes are being initiated by more companies to recover values from too-short and too-narrow pieces of lumber. Shown here is operation at Arcata Redwood Co., Arcata, California. Redwood stock is passing through second of two Randell Fenton finger jointing machines, which puts on the second joint. Glue is applied on this edge as stock leaves machine, with applicator wheel shown in photo. First end has been finger-jointed on Randall Fenton machine shown in left distance. Mann-Russell electronic moisture detector on conveyor between two machines rejects stock of improper moisture content. After leaving second machine pieces are pushed together end to end on conveyor belt in foreground for passage through Mann-Russell electronic field for glue setting. By finger-jointing and end gluing narrow widths and short pieces of redwood lumber, values are recovered from material previously not usable. See complete story on page 38.

Industry Meetings

July

Northwest Hardwood Association, quarterly meeting, Leopold Hotel, Bellingham, Wash., July 20.

Pacific Division, National Wooden Box Association, Fresno Hacienda Motel, Fresno, Calif., July 17-18.

Appalachian Hardwood Manufacturers, Inc., summer meeting, Homestead Hotel, Hot Springs, Va., July 22-23.

August

Society of Automotive Engineers, Seattle, Aug. 12-16. (Members of forest industries will be participating.)

September

Association of State Foresters, Longview, Wash., Sept. 11-13.

Western Pine Association, semi-annual meeting, Multnomah Hotel, Portland, Ore., Sept. 11-13.

Hoo-Hoo, 66th annual national convention, Dinkler-Plaza Hotel, Atlanta, Ga., Sept. 15-18.

Northern Sash and Door Jobbers Association, Minneapolis, Minn., Sept. 30 - Oct. 2.

American Forestry Association, 82nd annual meeting, Sept. 30 - Oct. 2, Loraine Hotel, Madison, Wis.

October

Pacific Logging Congress & Machinery Show, Seattle, Oct. 30 - Nov. 1.

December

Western Forestry & Conservation Association, Olympic Hotel, Seattle, Wash., Dec. 10-13.

THE Lumberman

LUMBER · PLYWOOD · BOARD · WOOD MANUFACTURING

Presents as Tall Timber

ARTHUR TEMPLE, JR.

ARTHUR TEMPLE, JR., president, Southern Pine Lumber Company, Diboll, Texas.

ARTHUR TEMPLE, JR., a man to watch in the industrial development of Texas' Gulf Coast region, has already stamped the famed Temple trademark on a series of enterprises ranging from a radio station to a brand new pulp mill — all built around a lumber empire of typical Texas-sized proportions.

Not yet thirty-eight, he is president of a dozen wood products industries, including Southern Pine Lumber Company, the South's largest lumber manufacturer. Although he has reached the upper rungs of his ladder to a place in the sun, prospects are that his rise will continue for many years to come.

Son of the late Arthur Temple, Sr., pioneer lumber manufacturer of Texarkana, Arkansas, young Temple grew impatient with classroom work at the University of Texas before obtaining his degree and dropped out to go to work in the family forest product enterprises.

HIS FIRST JOB was bookkeeper at the Paris, Texas, branch of the Temple Lumber Company, retail division for the huge Southern Pine Lumber Company. He serves today as chief executive of both organizations.

Arthur had been advanced to assistant manager and then manager of Temple's yard in Lufkin and had organized a thriving general contracting business on his own when he was called into the Navy in 1945. After his stint in the Navy during World War II, Arthur Temple returned to Lufkin and the lumber yard.

However, selling lumber and building materials was not time-filling enough for this young man. In between organizing fund-raising drives for the Community Chest and being elected one of the five outstanding young men in Texas by the state organization of Junior Chambers of Commerce, he expanded and enlarged his own construction company. With borrowed capital from the first he launched housing developments in three or four different cities of Texas and laid the ground work for the now substantial general contractors, Temple Associates.

OTHER VENTURES were organized. Some were charged up to experience, but most succeeded—largely because of the zeal for work and accomplishment of Arthur Temple, Jr.

By 1948 young Temple had made a name for himself which even his kinsmen could not discount. He had done so well that the owners of Southern Pine Lumber Company gave him the job of running their plant at Diboll, Texas—the hub of the Temple lumber interests.

In the face of conservative head-shaking and dire predictions by a large part of the lumber industry, he led in the execution of the boldest automation of a sawmill ever undertaken in the South. The Diboll plant became a model of mechanized efficiency, not only to the South, but to the entire industry.

The personnel program of Southern Pine was revamped to include job evaluation and merit rating—heretofore almost unheard of in deep East Texas. Retirement and hospitalization insurance benefits were increased, incentive systems instituted, an executive training program commenced, and modern personnel services began.

Company houses were sold or torn down as fast as employees could establish themselves on their own.

A new, half-million dollar shopping center replaced the company store. Complete from bank to movie house, the center was built in cooperation with independent business men who opened stores to serve the mill community.

LATEST OF THE TEMPLE ventures is a news-and-music radio station, with the call letters KSPL no coincidence. Its studios are located only a short distance from the headquarters of the Southern Pine Lumber Company.

Recognition of Arthur's achievements in revamping Southern Pine came in his election to the presidency of the company, in addition to the general managership, in 1951. He had just passed the tender age of thirty-one.

From his paneled office in Diboll, Texas, Temple directs the operations of more than a dozen man-sized corporations. Included are such firms as Temple Associates, Temple Associates

(*Continued on page* 70)

AUTOMATIC TROUT SETWORKS

SAWYER CONTROLLED
FAST—ACCURATE—MECHANICAL

The TROUT SETWORKS has always set the ACCURACY standard for the sawmill industry. KLAMATH MACHINE & LOCOMOTIVE WORKS, INC. now has designed sawyer operated, automatic remote controls for the KLAMATH ANTI-FRICTION BEARING TROUT SETWORKS. This has been accomplished with no alteration whatever in the mechanical principles which give the TROUT SETWORKS its unfailing accuracy.

NOTE THESE FEATURES

1. *Complete sawyer operation.*
2. *Trout accuracy maintained to .015"*
3. *Setting speed maintained.*
4. *Automatic operation reduces wear on parts.*
5. *Maintenance is simple.*

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The LUMBERMAN'S LOOKOUT

UNITIZED SHIPPING, MECHANICAL UNLOADING OF LUMBER continue to gain backing, can be expected to become more general. The materials handling committee of the National Retail Lumber Dealers Association is work- with railroads and lumber manufacturers to provide cars which can be loaded at minimum expense. Plug-door types for future replacements and additions are being urged. The association's goal is to unload 1000 board feet a minute through unitized shipping and mechanical unloading of lumber in box cars.

ECONOMIC FORECASTS FOR BALANCE OF 1957 indicate slowly rising business activity, coupled with more creeping inflation. Except for the lumber and plywood industries, it's hailed as "probably the best year in the history" for total earnings, unemployment and production. Total value of all goods and services is expected to be about six per cent above that of 1956. Caution: Much of these dollar gains may be merely price increases.

TOO MUCH EXPANSION TOO FAST is another prediction by an economist. Industry should take a second look at its expansion plans and Uncle Sam should take a second look at his expenditures. Advice: slow up. Soft spots in economy are home construction and automobiles.

UNCLE SAM WILL BE MONEY SHY in 1957. Cost of handling national debt has gone up. With better interest returns available from municipal bonds or stocks, public investors are becoming less interested in government bonds. As government maturities materialize, refunding becomes more of a problem.

HOUSING FOR 1957 MAY HAVE HIT the bottom of its slump, an eight-year-low tailspin which has affected lumber and plywood profoundly. Builders are watching Congress' action on a pending housing bill which would reduce payments on FHA purchased homes. But there's much difference of opinion on whether higher interest rates should be asked. Informed guesses now are that the administration's hard money policy will continue under the new treasury chief.

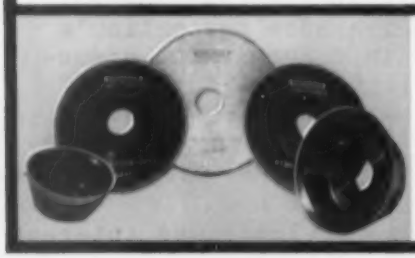
UNEXPECTED IMPACT OF HOUSING STARTS due to demolitions or replacements of living units destroyed by rights-of-way clearance for nation's expanded highway program is now expressable in figures. One economist states that currently 280,000 units will be required in 1957 for demolition and disaster losses. That's up from rate of about 40,000 to 50,000 annually before World War II. It's also about one third of nation's total housing starts for 1957, a factor not to be disregarded.

SAWMILLS IN PACKAGES will be available more and more. Increased interest in automated mills has resulted in catalog order business. You decide how big a capacity mill you want, specify the size of logs involved and special conditions and then order the complete unit from an "automation package". It comes complete with all production machines, chains and conveyors, and detailed mill layout and plans.

CORPORATE MERGER TREND REFLECTED also in forest industries may be slackened as result of recent Supreme Court ruling that DuPont's stock investment in General Motors Corp. violates anti-trust laws. This new interpretation of law exposes many new implications not previously considered, may make companies previously not "suspect" come under closer scrutiny. Financial world disturbed about apparent retroactive features of ruling.

Your fastest saws get fastest sharpening ...with Norton diamond wheels

Extra Fast Cutting Action is just one common denominator of a Norton diamond wheel and a carbide-tipped saw. Also, both are engineered for top performance and lowest rate of wear. Norton diamond wheels, for example, have the size-holding ability that assures uniform height to each carbide tooth — which means saws give much longer and better service between sharpenings.



Norton Pioneered All Of Them. Norton was first to introduce all three types of diamond wheels — resinoid, metal and vitrified bonded . . . does all its own sizing, grading and checking of diamonds . . . duplicates wheel specifications with constantly controlled accuracy . . . brings you a complete line, with fast service.

Sharpening your carbide-tipped saws with Norton diamond wheels brings you a team unequalled for profit-boosting lumber mill operations.

One factor that makes these sharpening wheels your best buy — every time — is Norton's long leadership in diamond wheel development and manufacture. They're the recognized "Crown Jewels" for carbide grinding and other diamond wheel applications, with a thoroughly proved reputation for cutting production costs.

See Your Norton Distributor for prompt deliveries of these money-savers, available in two popular resinoid bond types — regular B for wet grinding and B6 for dry grinding. The Norton grinding wheel plant at Santa Clara, California supplies West Coast distributors with these diamond wheels and other types used by the lumber industry. Or write to NORTON COMPANY, General Offices, Worcester 6, Mass. W-1818

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NORTON PRODUCTS
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Grinding Machines • Refractories
BEHR-MANNING DIVISION
Coated Abrasives • Sharpening Stones
Behr-cat Tapes

INDUSTRY TRENDS

LUMBER PRODUCTION in the first quarter of 1957 was lower than in any first quarter since 1950, yet exceeded effective demand. Production totaled 8.1 billion feet, 9.1% behind a year ago. Shipments were 7.87 billion feet, orders 8 billion feet. With shipments failing to equal production, gross mill stocks continued the gradual increase evident throughout the half of 1956. New orders exceeded shipments resulting in an increase in unfilled orders. However, unfilled orders at the end of March were below year-ago levels.

* * *

CARLOADINGS of forest products from the Pacific Northwest are expected to decline 6.5% in the third quarter, the Pacific Northwest Advisory Board reports. Plywood, producing at a rate above a year, expects a gain of 6% in shipments.

* * *

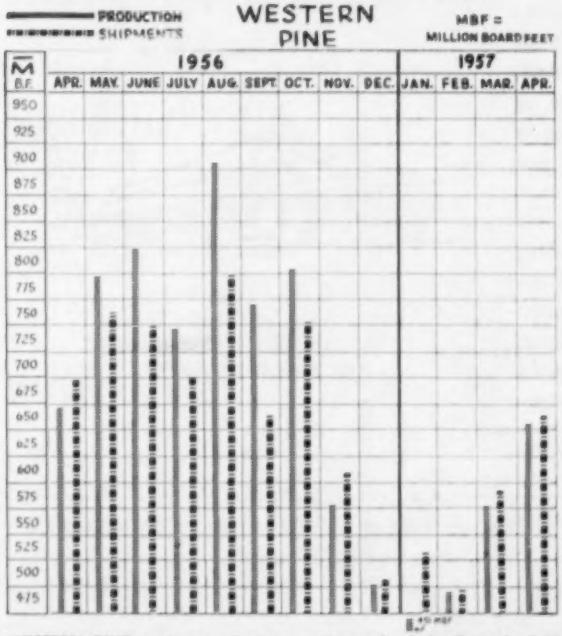
BOX SHOOK SHIPMENTS from the Pacific Northwest in May exceeded May a year ago, but the total for the first five months still lags behind a year ago. Shipments in May from identical plants is up 2.5% over a year ago; for the first five months shipments are down 6.8%.

* * *

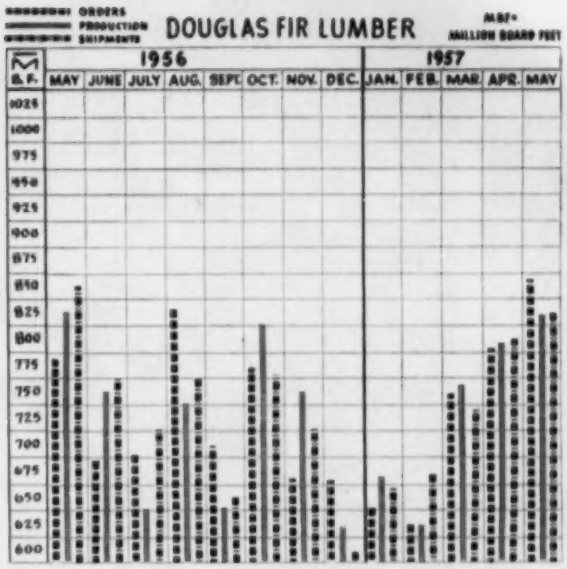
VANCOUVER, B. C. area logs stocks continued high, particularly in Douglas fir as fir mill refuse to build up log inventories. Prices, generally remain steady except in cedar.

* * *

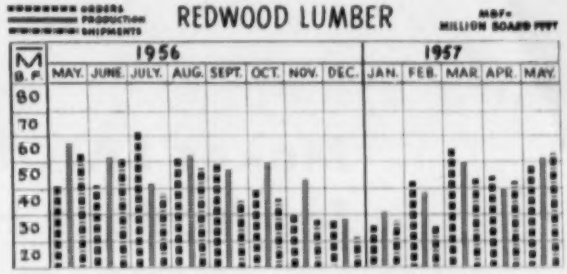
SOUTHERN PINE production is running about 5% behind a year ago and shipments are off 1%. The order file, however, is improving and orders booked by mid-June were 1% ahead of 1956.



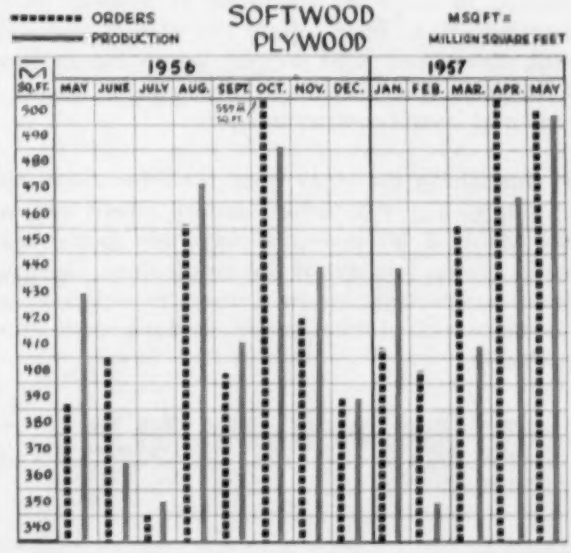
WESTERN PINE region production at the end of April totals 2.15 billion feet, compared to 2.3 billion feet a year ago. Shipments total 678 million feet, compared to 690 million feet a year ago. Gross stocks on April 30 were 1.98 billion feet.



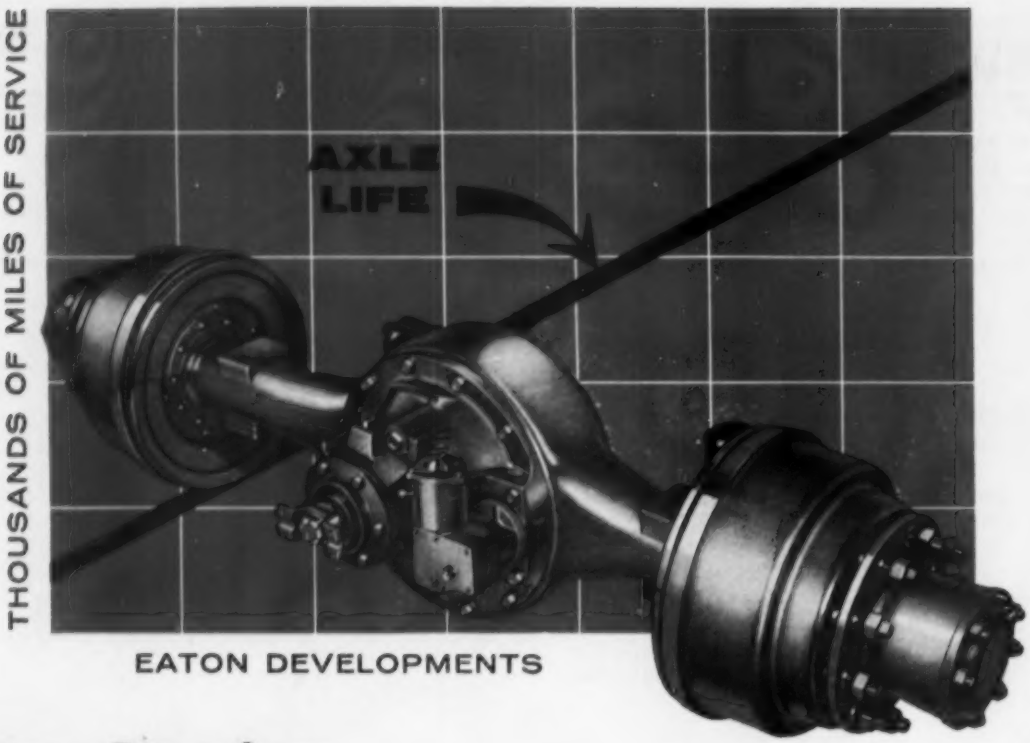
DOUGLAS FIR region production at the end of May totals 3.8 billion feet, compared to 3.9 billion feet a year ago. Orders to date are 3.7 billion feet. Unfilled orders at the end of May total 678.5 billion feet; gross stocks are 1.2 billion feet.



REDWOOD PRODUCTION in May is up 3 million feet over April but is well behind May, 1956. Shipments follow the same pattern and both are down 17% from a year ago. Orders on hand total 54.9 million feet, stocks, 406.3 million feet.



DOUGLAS FIR PLYWOOD production at the end of 25 weeks totals 2.6 billion square feet, up 2.9% from a year ago. The weekly production average is 103.9 million square feet, compared to 101 million a year ago. Unfilled orders are 331.7 million square feet.



Extra Stamina

Makes EATON 2-Speed Axles BEST for Modern High-Powered Trucks

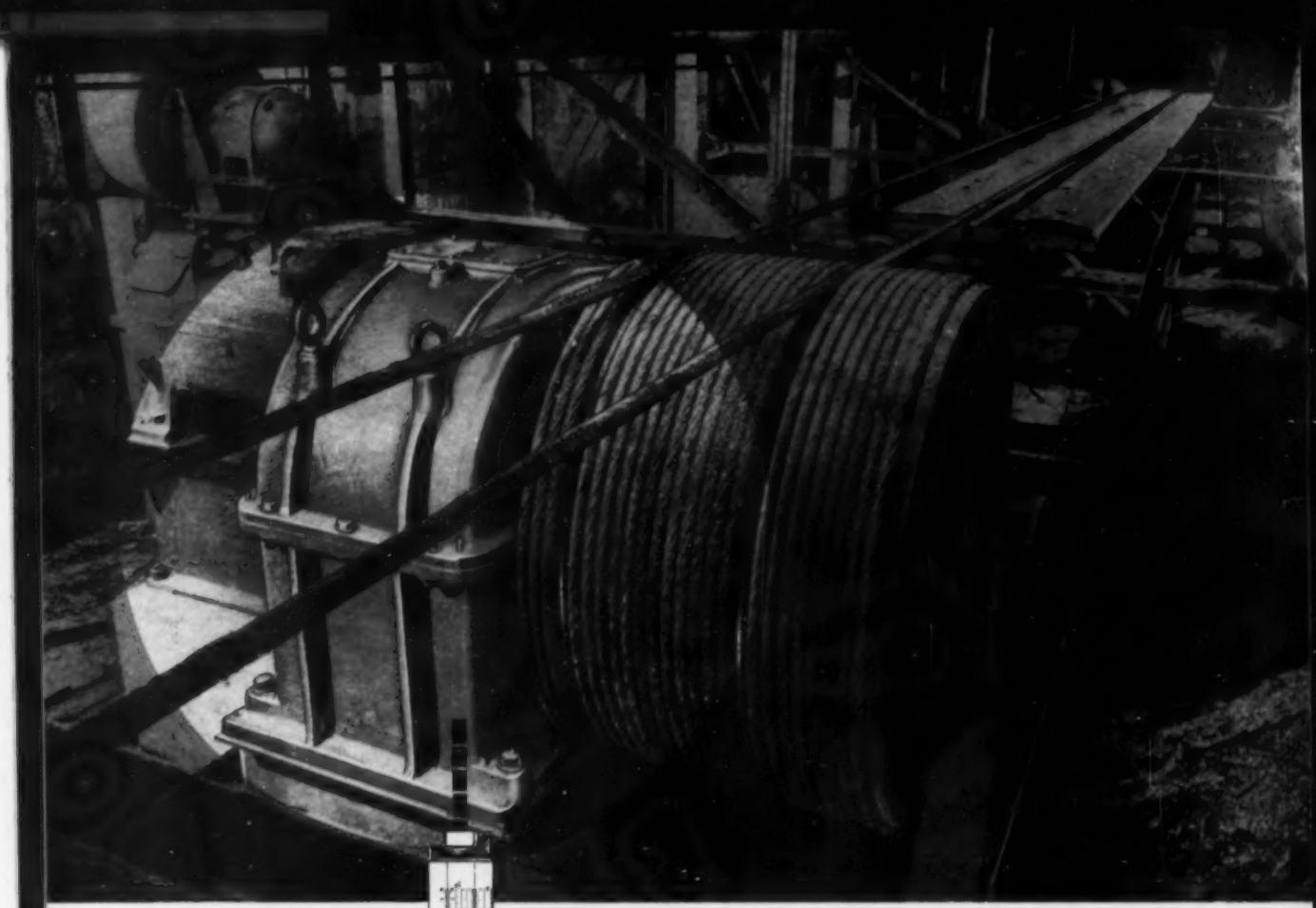
Through continuous advancement in design and metallurgy, Eaton 2-Speed Axles provide the greater stamina needed to meet the demands of modern motor truck transportation. They supply the perfect combination of ruggedness and light weight, which means that Eaton Axle trucks haul maximum payloads, at lowest cost per ton—and lowest cost per mile.

By furnishing the right gear ratio for every operating condition, Eaton 2-Speeds reduce stress and wear on engines and all power transmitting parts; they keep trucks on the job, out of the repair shop. Operating and maintenance costs are held down to rock bottom; trucks last thousands of miles longer, and are worth more when traded-in.

More than Two Million Eaton Axles in Trucks Today. For complete information, see your truck dealer.

EATON — *AXLE DIVISION*
MANUFACTURING COMPANY
CLEVELAND, OHIO

PRODUCTS: Engine Valves • Tappets • Hydraulic Valve Lifters • Valve Seat Inserts • Jet Engine Parts • Hydraulic Pumps Motor Truck Axles • Permanent Mold Gray Iron Castings • Forgings • Heater-Defroster Units • Automotive Air Conditioning Fastening Devices • Cold Drawn Steel • Stampings • Gears • Leaf and Coil Springs • Dynamatic Drives, Brakes, Dynamometers

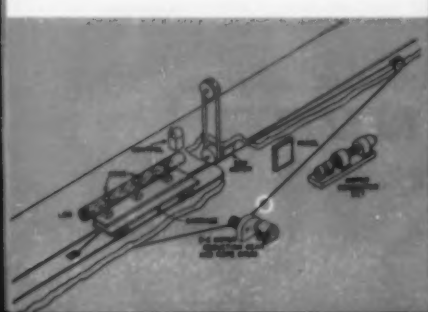


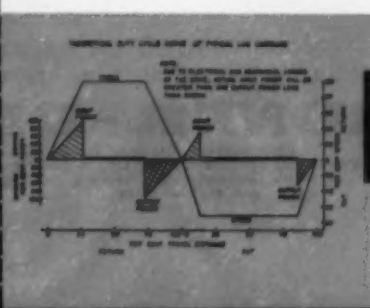
WESTERN GEAR speed reducers insure RELIABLE log carriage drive operation

Using a Western Gear speed reducer (foreground), the General Electric log carriage drive has proved a profitable investment for progressive lumber producers. Substantial savings in fuel and maintenance costs plus an extra margin of safety in operation have been some of the benefits of recent installations.

When the electric log carriage was first developed, Western Gear engineers were called in to design and manufacture a speed reducer for the unit which would be more reliable than any yet produced. Our engineers were well aware that a failure of the carriage drive could not be tolerated for it would mean a costly mill shutdown. That our engineers did their job well is proven by the fact that there are now many such drives operating in the mills. Many mills are now converting from steam to electric log carriage drives.

There are *many thousands* of Western Gear speed reducers in mill service throughout the nation. Their owners are enjoying the satisfaction that comes from wise investment in quality Western Gear products. If your problem involves gearing, enclosed drives or special machinery, you can rely on Western Gear for a completely satisfactory installation. For assistance without obligation, write Western Gear Corporation, General Offices, P.O. Box 182, Lynwood, Calif.





"The difference is reliability" • *Since 1888*

WESTERN GEAR Corporation

ENGINEERS AND MANUFACTURERS

PLANTS AT LYNWOOD, PASADENA, BELMONT, SAN FRANCISCO (CALIF.)
SEATTLE AND HOUSTON — REPRESENTATIVES IN PRINCIPAL CITIES

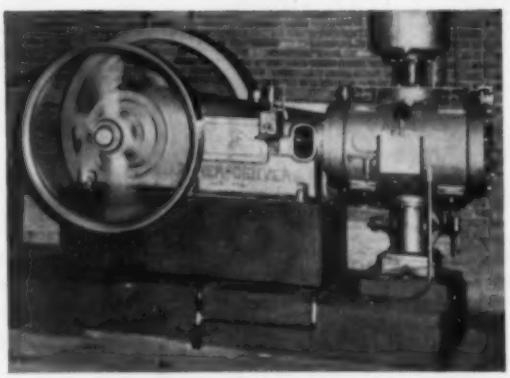
For now and when . . . the Gardner-Denver RX

Selecting a compressor? Keep the future in mind. Have the air you need now, with extra capacity in reserve. Air is so easy to use and new applications can pop into your system before you realize it. When they do, be ready for them.

When it comes to selecting the right compressor, you'll find a Gardner-Denver RX model to meet your capacity and pressure needs. A compressor choice for economical operation now, with reserve power for future needs.

The RX is designed for continuous operation, economy and long life. Under the dust-tight main frame are compressor parts that keep on the move with the minimum of maintenance. A compressor that meets your needs at low power cost.

Our engineers will gladly cooperate in helping you select the right RX. Sizes from 100 to 1410 cfm piston displacement, for pressures from 15 to 150 psi. Write for bulletins.



Gardner-Denver RX Compressor.

ENGINEERING FORESIGHT—PROVED ON THE JOB
IN GENERAL INDUSTRY, CONSTRUCTION, PETROLEUM AND MINING

GARDNER - DENVER

Gardner-Denver Company, Quincy, Illinois
In Canada: Gardner-Denver Company (Canada) Ltd., 14 Curity Avenue, Toronto 16, Ontario
Branch Offices: Seattle, Vancouver, San Francisco, Los Angeles, Salt Lake City, Denver and Wallace, Idaho

Would you slice bread with a sword?

You could, but you would do a better job with a bread knife. Whatever the job, the right knife does it best! The right knife for your chipping operation is an "OK BATTLE AXE". It's especially designed to do the job best, to give maximum production of uniform chips with a minimum of sawdust and splinters.

Special high alloy steel, hardened in salt furnaces and carefully tempered, gives every "OK BATTLE AXE" blade its extra toughness, its extra-long edge life. To you, this means longer runs between grindings.

"OK BATTLE AXE" knives are made to customer's requirements and complete records are kept to assure exact duplication of original orders without delay.

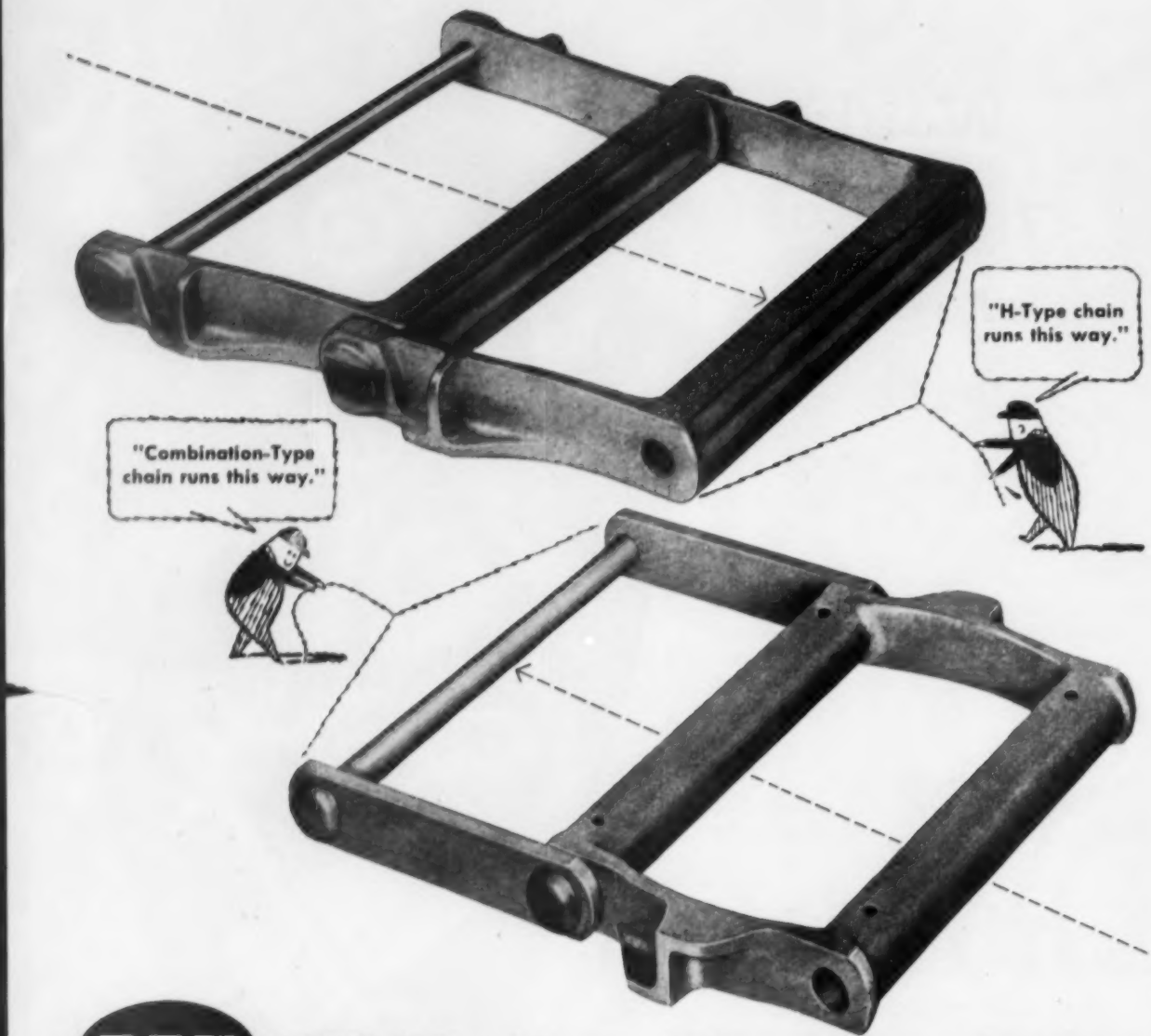
Ohio Knife Co. field service men, experienced in chipping operations, can be sent to your mill to analyze your particular chipping problems and recommend correct tempers, bevels, etc. to best suit the job. No obligation, of course.

For complete information on "OK BATTLE AXE" Chipper Knives, write Dept. **49-R**

THE OHIO KNIFE CO.

CINCINNATI 23, OHIO

Manufacturers of OK HOG KNIVES, VENEER KNIVES, CHIPPER KNIVES, PLANER KNIVES.



REX® Mill Chains...take your choice

Take your choice between two types of Rex Conveyor Chain—each a proved performer in lumber mill service. They move sawdust, refuse and other mill materials, and operate over the same sprockets and in the same trough. Because of their width (up to 16 inches), they provide great capacity at slow speed.

Rex H-Type Mill Conveyor Chain is the Old Faithful of the industry, and you may wonder why there is also Rex Combination-Type Mill Conveyor Chain. It's because we have learned to make a chain that we think is a little better than the very good H-Type. Combination-Type has larger diameter rivets, steel strap connecting links and securely locked pins. This means less corrosion fatigue, higher working loads and ultimate strengths—plus the ability to weld attachments to the connecting link. Combination-Type is the chain to cope with today's expanded operating requirements.

H-Type or Combination-Type—take your choice. You'll have a chain that will live long and do your job as it should be done. For all conveyor and drive chains for mill service, see your CHAIN Belt Distributor. CHAIN Belt Company, 4653 West Greenfield Ave., Milwaukee 1, Wisconsin.

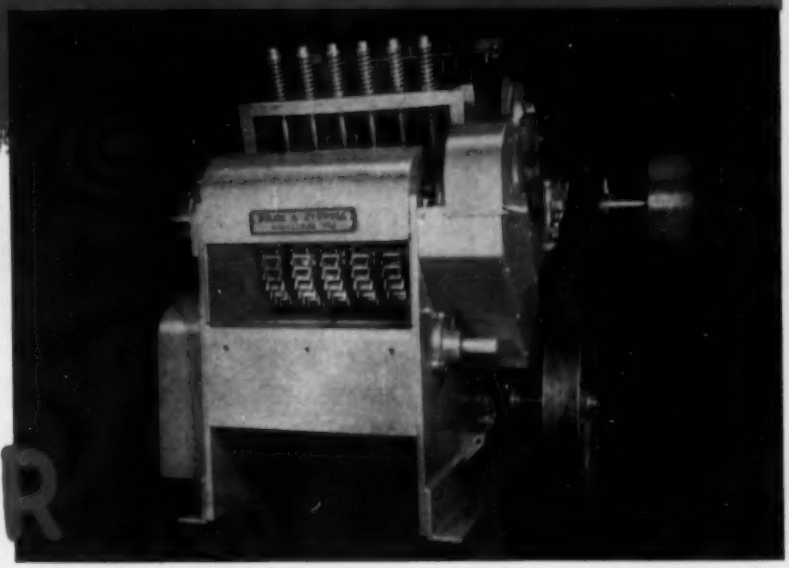
CHAIN BELT COMPANY

Milwaukee 1, Wisconsin

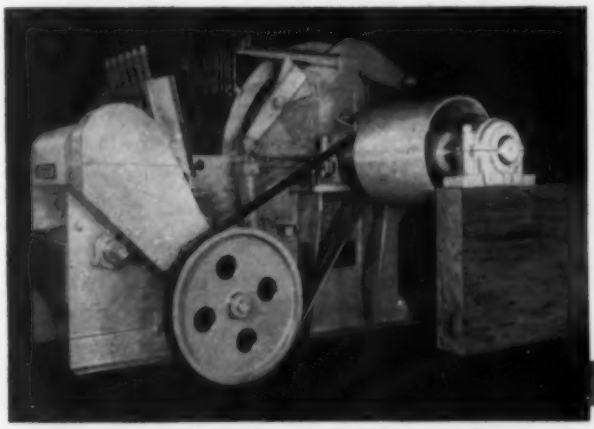
Announcing

FILER & STOWELL'S

NEW sawmill refuse CHIPPER



DESIGNED ESPECIALLY for SLABS, EDGINGS and TRIM BLOCKS



Converts sawmill waste to high-grade, uniform size pulp chips at the rate of 10 cords per hour! Contains features that sawmill operators have long wanted, such as: *Large opening designed for refuse; Simple installation; Controlled horizontal feed; Automatic clearing cylinder; Individually hung pressure fingers which follow contour of the knives holding the ends of the stock being chipped.* Discharge is either through bottom or at rear as desired. Available in different sizes.

Write for Complete Information and Prices

100th ANNIVERSARY
1856-1956

THE FILER & STOWELL COMPANY
MILWAUKEE 7, WISCONSIN

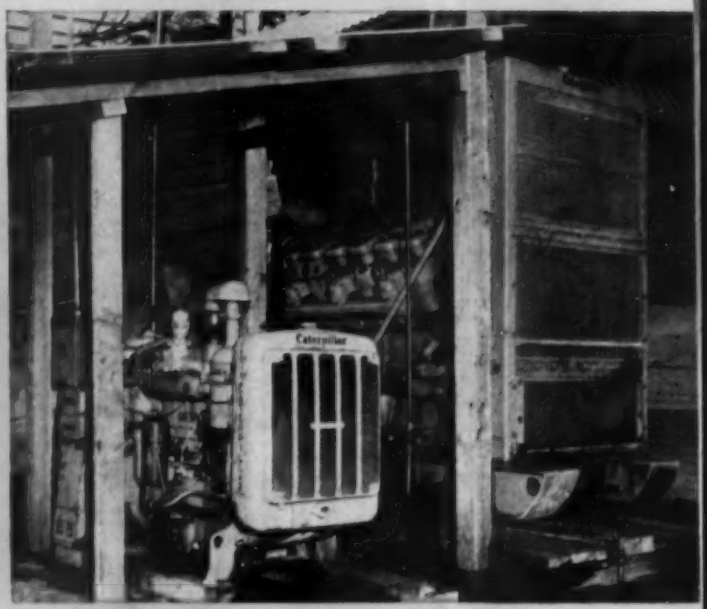
VETERAN D311

26,540 HOURS

NEW D397

4500 HOURS

BOTH DO "A PERFECT JOB" FOR GALLACCI LUMBER CO.



These two Cat Diesel Electric Sets power the Gallacci Lumber Co. sawmill, which has a capacity of 50,000 bd. ft. an 8-hour day. Logging redwood and fir on a 2000-acre tract, the company also uses two D8 Caterpillar Diesel Tractors, a D7 and a No. 6 Traxcavator.

Since May, 1954, two CAT* Electric Sets have provided *all* the power for the Gallacci Lumber Co. mill, 39 miles west of Cloverdale, Calif. Sawing 40% redwood and 60% fir, the mill has a capacity of 50,000 bd. ft. an 8-hour day. When this picture was taken, the veteran D311 had worked for 26,540 hours and the new D397 for 4500 hours. Reports on other D397s show that these heavy-duty units can be expected to run more than 20,000 hours without major repairs.

Asked about the performance of his power pair, owner Joe Gallacci said: "They're doing a perfect job—even better than I expected. In 22 years' experience in the woods, I've tried all makes of engines and tractors and have always found that Caterpillar-built equipment gives steadier production, lower maintenance and less down time."

His two sets, one old and one new, point up this fact about Caterpillar units: They're ruggedly built to deliver money-making production *from the start and for years.* What's more, at the time you buy them, you can be sure they feature the latest advances in power development. Here's why. Combining research with practical experience, Caterpillar constantly improves its products. Yet no matter how long they're in use, they never become "orphans." You can always get fast parts and service for them from your nearby Caterpillar Dealer!

To provide the *right* power for your requirements, Caterpillar offers modern heavy-duty electric sets up to 350 KW. Ask your Caterpillar Dealer to show you *proof* of their profitable performance!

Caterpillar Tractor Co., San Francisco, Calif.; Peoria, Ill., U. S. A.

CATERPILLAR*

*Caterpillar and Cat are Registered Trademarks of Caterpillar Tractor Co.

MODERN HEAVY-DUTY POWER

significant industry news

HARDBOARD PLANT PLANNED IN SOUTHEAST . . . Bowaters Fibreboard Co., Inc., plans construction of a hardboard plant in the Southeast which would utilize hardwoods. A plant costing $7.5 million and producing 500,000 square feet, ⅛-inch basis, every 24 hours is indicated by 1959. Decision to build the plant follows a year of experimentation with southern hardwoods in a pilot plant leased from Coos Bay Lumber Co., Coos Bay, Ore.

U. S. PLYWOOD CONSIDERING CALIFORNIA PAPER MILL . . . Establishment of paper pulp mill on the Sacramento River in Anderson, Calif., is being considered by the Shasta Plywood Division of U. S. Plywood Corp. as an adjunct to its wood products operations. Nothing has been decided on design, size, amount of investment, or employment. Being considered is a sulfate process kraft paper mill for container paper with an ultimate 400-ton-a-day capacity. The proposed plant would be built in stages.

MT. EMILY BUYS ECKSTEIN LUMBER CO. . . . Back in operation is the Jack Eckstein Lumber Co. mill at Elgin, Ore., following purchase of the facilities by Mt. Emily Lumber Co. The mill had been closed down for 60 days. The mill was built five years ago by Eckstein and at that time was considered one of the most modern of small circular mills. Rod Davidson, plant manager of the Elgin operation of Mt. Emily, is in charge of the operation.

NEW MANUFACTURING UNIT IN CALIFORNIA . . . Covington Lumber Co., Minersville, and the Wilson Moulding Co., Redding, have indicated plans to build a sawmill with remanufacturing facilities just north of Buckeye, Calif. The installation would include a moulding plant, planer and dry kilns. Start of construction is anticipated shortly.

PHILIPPINE PLYWOOD PLANT NEAR PRODUCTION . . . Production is expected in late October at the Philippine Woodcraft & Veneer Co.'s new plywood plant near Davao, Mindanao, Philippines. Gus Arneson, technical director, on a short trip to the Pacific Northwest, says the company is considering installing some sawmill machinery and a veneer slicer in order to obtain more complete utilization. Arneson, who was manager of the Anacortes Veneer, Inc., Anacortes, Wash., is taking Mrs. Arneson and two daughters back to Manila where they will live.

SOUTH CAROLINA MILL PURCHASED . . . Argent Lumber Co., Hardeeville, S. C., whose assets include a sawmill and 42,000 acres of Georgia and South Carolina timberland, have been acquired by Union Bag-Camp Paper Corp. The timber lies tributary to the big Savannah, Ga., paper mill of Union Bag. The Argent Lumber Co. mill has a production capacity of 7000 feet an hour.

CO-OP MOVES TO BUY G-P's BELLINGHAM PLANT . . . Bellingham Plywood Corporation, a co-op, has been granted a permit by the state of Washington department of licenses for the sale of 250 shares of stock to raise money to purchase the Bellingham plywood plant of Georgia-Pacific Corporation. G-P has granted the option. The transaction would run about $1.3 million. G-P would supply a "substantial part" of the log needs for the first four years under new ownership, on a continuing basis agreeable to both parties. Officers of the co-op are C. B. Marconi, president; E. A. Hatch, vice-president; S. L. Carr, secretary. All are key employes at the plant. It is anticipated that Arthur Olson, in charge of the operation for G-P, will continue in that capacity. R. B. Robbins, North-Robbins Plywood, Inc., Seattle, Wash., is acting as agent, and will handle sales of the plant output, along with Georgia-Pacific.

PACIFIC NORTHERN TIMBER CO. has until September 1 to present plans for its planned integrated forest products installation at Wrangell, Alaska. The U. S. Forest Service has extended the company's July 1 deadline. Pacific Northern Timber is a Portland, Ore., based firm which has a long-term national forest timber allotment for 3 billion feet in the Wrangell area, contingent on construction of a sawmill, small pulp plant and other utilization facilities.

A NEW SAWMILL AT VANCOUVER, B. C., is to be built by Western Gypsum Products Ltd., Winnipeg. The firm recently acquired the property of Capilano Timber Co., Vancouver, B. C. The former mill has been demolished and a new one will be built. Western Gypsum, a subsidiary of British Plaster Board Ltd., London, England, recently purchased Westroc Industries, Ltd., Vancouver, B. C., and Columbia Gypsum Co., East Kootenays and Spokane, Wash.

E. V. PRENTICE MACHINERY CO. has purchased the plant and equipment of the Mt. Hood Hardboard and Plywood Co-op of Estacada. Prentice company spokesmen say reopening plans are indefinite.

MOUNTAIN MILL CO., Willits, Calif., expects to start operation in August of a plant that will mold plywood cores for use in table tops, desks, cabinets and other types of furniture.

BROWNSVILLE PARTICLE BOARD & ASSOCIATION PRODUCTS, INC., at Brownsville, Ore., started test runs early in July and expects to be in operation by the end of the month.

A PULP AND PAPER MILL SITE IN LOUISIANA has been secured by the Crown Zellerbach Corporation through exercise of options taken early in 1956 on a site six miles west of De Ridder. The company simultaneously exercised options on 27,000 additional acres adjacent to De Ridder in southwestern Louisiana. A portion of this property will be turned into a lagoon to impound mill effluent; the remainder will be used as the nucleus of a reforestation program. C-Z will set up its forestry organization in De Ridder this winter. Construction of the mill is not iminent.

POTLATCH YARDS, INC., Spokane, Wash., has been merged into Boise Cascade Corporation as the result of approval by shareholders. The merger was effective July 1. Potlatch Yards will be operated as a retail division under A. E. Montgomery. Potlatch Yards Wholesale Co., Seattle, Wash., will be taken over by Morrison-Merrill & Co., and will operate under the name of Morrison-Merrill & Co. of Seattle. Two other companies in which Potlatch Yards held controlling interest, Graystone, Inc., and Pre-Mix, Inc., will also come under Boise Cascade ownership.

E. R. T. FOAD has been re-elected chairman of the Fibre Building Board Development Organization in Great Britain.

JOHN A. WAHL, long-time logging manager for Weyerhaeuser Timber Co., retired July 1. He will be succeeded by Philip H. Hogan, assistant to Wahl since last fall and previously woods superintendent at WTC's Snoqualmie Falls branch. Wahl has been with WTC since 1922, has been logging manager since 1948.

NEW ASSISTANT SALES MANAGER at New Mexico Timber Co. is George B. McGill who took over the post July 1. He was most recently affiliated with Western Lumber Co., Medford, Ore. Robert Gallagher, sales manager of New Mexico Timber Co., says the addition is in keeping with New Mexico Timber's expansion plans.

WILLIAM J. McCUDDEN has been appointed manager of lumber research and products development of the Diamond Match Co.'s western lumber operations. He will headquarter in Chico, Calif., report to Dr. J. E. Foote, director of the firm's research and development department. McCudden joined Diamond in 1956 as planning engineer for the California division. He was previously with Weyerhaeuser Timber Co. as a consulting engineer.

HUGH LINEWEAVER, formerly in charge of merchandising for Forest Fiber Products Co., Forgest Grove, Ore., became affiliated with Abitibi Corporation at Detroit, Mich., July 1 as merchandising manager to market insulation board and hardboard from Abitibi's new Alpena, Mich., plant. The Alpena plant will go into production this summer.

SIDNEY MACKINS, Simpson Redwood Co., Arcata, Calif., and Clifford Toothman, International Woodworkers of America, AFL-CIO, Local 13428, High Sierra Pine Mills, Oroville, Calif., are the new co-chairmen of the Northern California Forest Products Section, Governor's Industrial Safety Conference.

LLOYD MERWIN has been elected vice-president of Crown Zellerbach Corporation and general manager of converted products of the company's Gaylord Container division. He formerly was Gaylord vice-president in charge of operations in Texas.

DISTINGUISHED SERVICE by Paul W. Abendroth, Ishpeming, Mich., to the Northern hardwood flooring industry was recently acknowledged at the summer meeting of the Maple Flooring Manufacturers Association. Abendroth is a 50-year veteran in the flooring industry.

COLIN HEMPSALL, publicity director of the Plywood Manufacturers' Association of British Columbia, has completed a tour in the United Kingdom to test the market for a promotional campaign to expand the sales of B. C.-produced Douglas fir plywood in Britain.

F. R. WEDDINGTON of Wm. Cameron & Co., Waco, Tex., has been re-elected president of the Southern Sash & Door Jobbers Association. Other officers re-elected include J. W. Zuber of Zuber Lumber Co., Atlanta, Ga., vice-president, and Thomas Birchfield, Memphis, Tenn., secretary-treasurer.

VICTOR O. SANDBERG, regional training officer for Region 1 of the U. S. Forest Service, has been promoted to assistant chief of the division of personnel management at Missoula, Mont. He takes over the post held since 1937 by Sidney E. McLaughlin, who is transferring to Atlanta, Ga.

CHARLES E. FALK has been appointed superintendent of the Albeni Falls, Wash., plant of the Diamond Match Co. Falk has been with Diamond since 1928, in the lumber industry for 35 years. His most recent position with Diamond was as assistant superintendent at Albeni Falls.

HARRY W. CAMP, head of forest economics research of the Intermountain Forest and Range Experiment Station, has been advanced to staff assistant in the office of the chief of the forest service in Washington, D. C.

THE NATIONAL PLYWOOD DISTRIBUTORS ASSOCIATION has moved from its former offices in Chicago, Ill., to Portland, Ore., where it will headquarter at 530 Terminal Sales Building. Charles E. Devlin, secretary-treasurer, has established himself in Portland.

WESTERN LABOR NOTES: A strike of British Columbia woods and mill workers has been avoided with an agreement reached by representatives of operators and unions. Under the agreement, wages will be increased 7½% or 13 cents an hour, whichever is greater. Basic wage has been $1.59 an hour. Provision is also made for a modified union shop, a new vacation clause and several other fringe benefits. The industry expects to pay about $9 million more a year to meet the increased payroll. In western United States, 3500 members of the International Woodworkers of America voted to accept a 5-cent-an-hour wage increase from Georgia-Pacific Corporation and Willamette Valley Lumber Co. Still uncovered are 32,000 members of the IWA and 43,000 members of the Western Council of Lumber and Sawmill workers. Nearly 19,500 workers in paper mills in Oregon, Washington and California accepted a new one-year contract giving them a 3½% wage increase and other benefits.

SOILS AND WATERSHED MANAGEMENT are due for greater emphasis in the Pacific Northwest Region of the U. S. Forest Service. A division of soils and watershed management has been established to be under the direction of Kermit W. Linstedt, regional fire control chief in the region for the past eight years. He will be succeeded in this post by Alfred E. Spaulding, formerly regional fire chief of the Northern Region at Missoula, Mont.

FEDERAL LAND PURCHASING POLICY changes considered by congress would work a hardship on the timber industry, Peter Dierks Joers, vice-president and a director of Dierks Forests, Inc., Hot Springs, Ark., informed a House government operations sub-committee. Joers opposed proposed legislation which would enable the federal government to expand land purchased for water conservation programs to include extra acreage for recreation facilities. He endorsed current federal land purchasing policies which limit land acquired for water conservation projects to acreages needed for those specific projects.

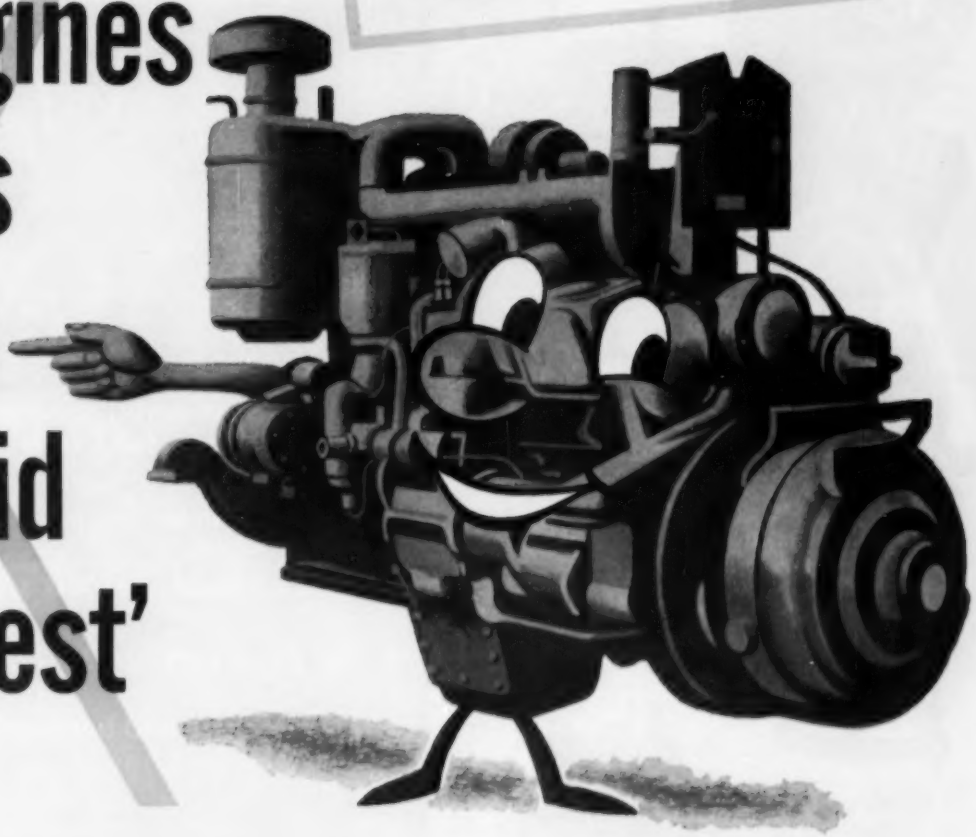
INTERNATIONAL PAPER CO. has been ordered by the Federal Trade Commission to sell all its recently acquired stock in Longview Fibre Co., Longview, Wash. International Paper has consented to the order which also prohibits it from acquiring any interest in competitors for the next 10 years. International is planning construction of a mill in Oregon and the FTC has ordered that at least 40% of the paper and paperboard output from this mill must be sold to independent, non-integrated wholesalers, converters and other purchasers located in the 11 Western states. FTC's order does not affect International's purchase of The Long-Bell Lumber Corp, but does require the sale of the 12% stock interest which Long-Bell holds in Longview Fibre Co.

CANADIAN COLLIERIES RESOURCES, LTD., Vancouver, B. C., despite a net loss in the fiscal year ended March 31, sees a promising future outlook. N. R. Whittall, firm president, says the new plywood mill put in full production during the last quarter of the firm's fiscal year, was on a profitable basis just prior to March 31. A program of modernization at both Flavelle and Timberland mills was started during the year and substantial reduction in costs have been achieved. Whittall explains the profit decline of the firm by a slow-up in housing in Canada and the United States, loss of overseas markets due to increases in ocean freight rates, and the premium on the Canadian dollar.

A worth-while story about Shell men, techniques and

SHELL RIMULA OIL

Now engines pass the 'acid test'



EVERY DAY of its working life, a heavy-duty engine faces the threat of *acid action*, the costly result of harmful acids formed during the combustion cycle.

Acid action eats away at piston rings and cylinder walls. It can steal years from an engine's useful operating life, destroy it faster than friction.

Can you protect an engine against the effects of harmful acids? Yes—thanks to Shell Research and a superior lubricant, SHELL RIMULA OIL.

Shell Rimula is *alkaline*. It neutralizes harmful acids, makes them powerless. The result? Added years of trouble-free engine performance, and greatly reduced wear rates.

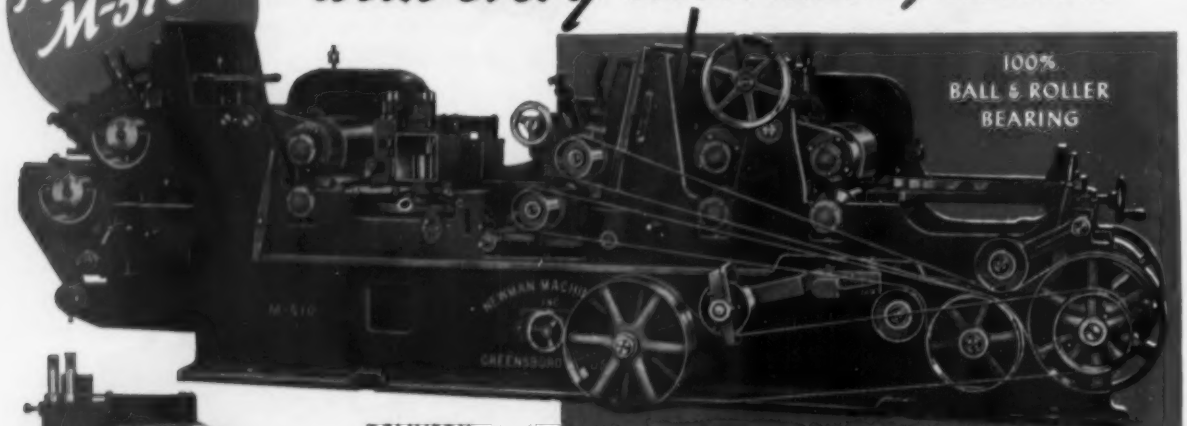
Rimula is the standard of quality for oils of its kind. Year after year, it is the only oil of its type which fully meets the specifications for America's leading diesel engines.

Chances are extra heavy duty Shell Rimula Oil or another superior Shell product is the right answer to one of your lubrication problems. These fine products are developed by Shell Research—a 1500-man team strong on lubricant experience. Why not put that experience to work this week?

A New 10" Roll PLANER & MATCHER with feeds to 250 feet per minute

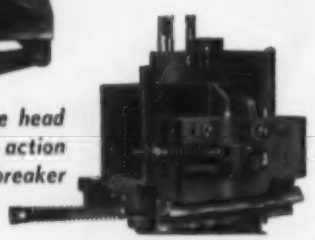
Newman M-510

A medium priced machine with every desirable feature

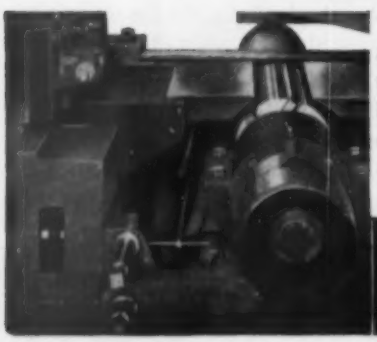


DELIVERY FROM STOCK IF YOU HURRY

Heavy duty side head units of long quill design



Left side head double action chipbreaker



Massive vibration free bed plate after bottom cylinder

- Simultaneous roll raising device for front bottom feed rolls
- Quick release for pressure bar
- Quick release for left side head
- All Sprockets steel—heat treated
- Flame hardened bottom bed plates and pressure bar
- Feed works reversible
- Wear resistant rigid solid steel long guide
- Chatter proof jointer units
- Roller knife setting gauge available

Newman Machine Co., Inc.

GREENSBORO, NORTH CAROLINA, U. S. A.

Safety Engineering

Plywood Association Awards Safety Plaques

AWARD WINNERS hold plaques. Back row, from left: Harold Evans, DFPA; Harry Mahoney, U. S. Plywood Corp., Kosmos Div., Kosmos, Wash.; Guy Hartle, Simpson Logging Co., Idanha, Ore. Front row, from left: R. P. Miller, International Paper Co., Long-Bell Lumber Company Div., Longview, Wash., holding Improvement Award for Mr. Swartz; Walter Swartz, Fortuna Veneer, Fortuna, Calif.; L. H. Coplen, Weyerhaeuser Timber Company, Longview, Wash.

• Safety awards for 1956 were presented to member firms at the annual session of the Douglas Fir Plywood Association, held in Gearhart, Ore. on June 10 and 11. In addition to the three rotating trophies (plus individual plaques which are retained by winners) of the Carleton L. Smith Memorial safety award, established last year, this year's awards included the "DFPA Plywood and Veneer Safety Improvement Award", awarded to the firm showing the greatest reduction in accident frequency and arriving at a frequency below the industry average.

Awards were presented by Robert P. Miller, International Paper Co., Long-Bell Lbr. Co. Division, Longview, Wash., past president of the Western Forest Products Safety Conference. Two firms tied for first place

(*Continued on page* 82)

California Firm Wins Award

SACRAMENTO BOX and Lbr. Co. honored for outstanding accident prevention record. Eric Engstrom (left), gen. mgr., receives Safety Award certificate from Carl Brown (right), safety engineer for Argonaut Insurance. Witnessing presentation are Frank Rainey (2nd from l.) of Tinnemann, Bridgeford and Rainey and Wayne Jensen, yard superintendent of lumber company. Company employs 140 people in Sacramento yard and 180 people in mill at Woodleaf, California.

"THAT'S ENOUGH OF THAT, LUNDBERG!"

Plant Wins Honors

Five safety awards, marking an all-time high in establishing safety records at the Klamath Falls, Ore. branch of Weyerhaeuser Timber company were awarded in June.

Jack B. Bishop, branch manager, accepted the awards on behalf of the employes. A. B. Hood, president of Western Pine association made the presentation.

Presented were:

- National Safety council's industrial safety award for first place in mills operating over 350,000 man hours.
- National Safety council's award of honor which has been won for the second consecutive year for lowering frequency of accidents.
- Forest Products Safety conference accident prevention award for first place among mills operating more than 750,000 man hours in 1956.
- Weyerhaeuser Timber company's sawmill division safety award for being in first place among all of Weyerhaeuser's sawmill operations.
- Weyerhaeuser Timber company's certificate of achievement which was won by the woods department for reducing its frequency from 60.72 in 1955 to 23.36 in 1956.

Safety Council Award

NATIONAL SAFETY Council's Public Service plaque for exceptional service to safety through editorial presentation was awarded to Albert Arnst, editor, THE LUMBERMAN, right, by Mayor Terry Schrunk, Portland, Ore.

Bigger Payloads... Less Cost to Operate... More Dependable!

That's why so much Western timber goes to mill via

RUGGED Autocar DIESEL

Throughout the Western timber and wood products industries, Autocar has made a reputation for itself—*greater payload ratios, lower operating costs, rugged dependability!* Whether you operate one truck or a fleet, you'll profit, too, when you put Autocar advantages to work for you. Get the proven facts now from your Autocar representative.

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Autocar's broad choice of component units enables you to obtain custom-built trucks for your specific needs. When you go Autocar, you can be sure you never pay for weight you don't need.

AUTOCAR DIVISION, THE WHITE MOTOR COMPANY, Exton, Pa.

Siempelkamp

You save one operator...

because this chipboard compregnation plant operates fully automatically once the work-cycle has been set.

The first commercially manufactured chipboard has been fabricated on Siempelkamp presses.

Today, Siempelkamp builds completely designed plants for all fabrication methods.

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NO REBORING—

NO KEYSEATING—

NO MACHINING—

NO WAITING!

TAPER-LOCK SPROCKETS
SINGLE AND DOUBLE STRAND!

NOW Taper-Lock *Double* Strand Sprockets are available—from stock—ready for the shaft without re-machining!

They offer all the advantages of Taper-Lock mounting. Easy on! Easy off! Precision machined at the factory, they come to you with accurate, concentric bores—insuring full contact between hub and shaft. Taper-Lock grips with the firmness of a shrunk-on fit!

There is no flange, no collar, no protruding part. Flush design means *safety*... If the sprocket becomes worn, you replace only the tooth part. The bushing is used again and again. And Taper-Lock bushings are interchangeable in Dodge Taper-Lock Sheaves, Couplings and Conveyor Pulleys!

Taper-Lock Sprockets and Dodge Roller Chain (made to ASA standards) are stocked by Dodge distributors. Single Strand sizes range from No. 40 to No. 160, up to 112 teeth; Double Strand from No. 40-2 to 80-2, up to 102 teeth. Write for Bulletin A-644 containing selection, installation and maintenance data.

DODGE MANUFACTURING CORPORATION
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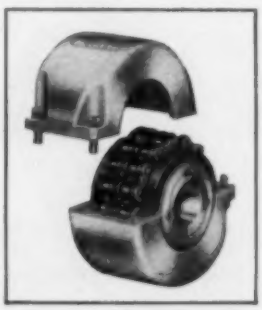
CALL THE TRANSMISSIONEER, your local Dodge Distributor. Factory trained by Dodge, he can give you valuable help on new methods. Look for his name under "Power Transmission Machinery" in your classified phone book, or write us.



TAPER-LOCK CHAIN COUPLINGS

Accommodates common minor shaft misalignments. Provides strong, compact coupling. Available with covers, for appearance, safety, dirt protection and lubrication—which increases coupling life.

STANDARD ENGINEER'S FIELD REPORT

PRODUCT RPM SUPREME MOTOR OIL

VETERANS TAXICAB CO.

FIRM San Francisco, California

Fleet cylinder wear only .0002″ per 10,000 miles using new RPM SUPREME Motor Oil

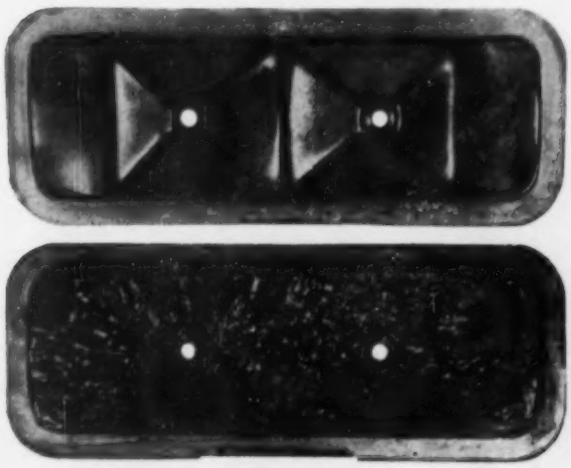
A

B

C

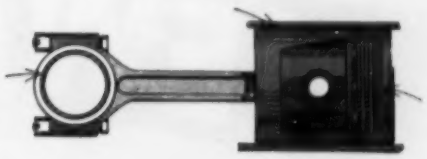
D

Using RPM SUPREME Motor Oil for 33,000 stop-start miles of low-temperature driving, engines of Veterans taxicabs showed average cylinder wear rate of only .0002" per 10,000 miles! Note excellent condition of piston A from typical engine using RPM SUPREME—all rings free, no clogging of oil ring vents. Piston B, from engine using conventional multi-grade oil, collected heavy deposits on rings and skirt. Oil ring vents are 40% clogged. Compare cleanliness of oil screens from these engines: with RPM SUPREME screen C remained clean, with no clogging of mesh. Screen D from other engine is 85% clogged.



Outstanding Detergent-Action advantages of new RPM SUPREME Motor Oil is proved by side cover deposit comparison. Cover at top shows virtually no deposits in 33,000 miles using new RPM SUPREME. At same mileage, heavy sludge coats cover of engine using conventional multi-grade oil.

New RPM SUPREME Motor Oil halts engine wear



- Exclusive Non-Metallic Polymeric Detergent-Action Compound keeps engines so clean, guards them so well, they last years longer.
- Anti-oxidant resists deterioration of oil and formation of lacquer.
- Engines get SUPREME protection in all seasons, climates, conditions.

For More Information contact your Standard Engineer or Representative, or write 225 Bush Street, San Francisco 20, California.

SUPREME RPM MOTOR OIL

TRADEMARK "RPM" AND "CHEVRON" DESIGN REG. U.S. PAT. OFF.

STANDARD OIL COMPANY OF CALIFORNIA

Serving the Industry Since 1852

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PREVENTS –

END SNIPING

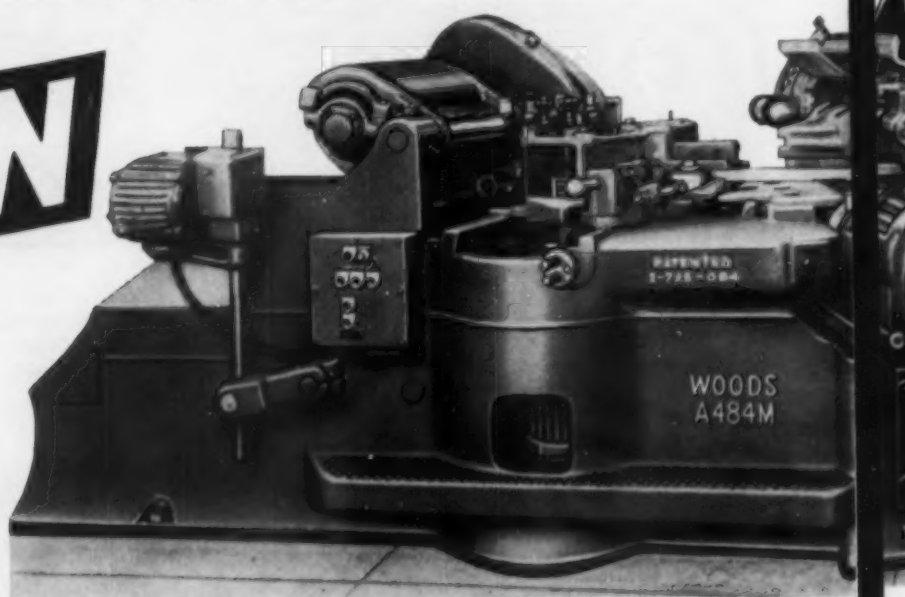
TORN GRAIN

KNOT LOOSENING

A-484M DIAGONAL **PLANER MATCHER**

Upgrading of all stock, with astonishing improvement in finish on the lower grades now made possible with the revolutionary DIAGONAL PLANER and MATCHER.

NEW



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Serving the Industry Since 1852

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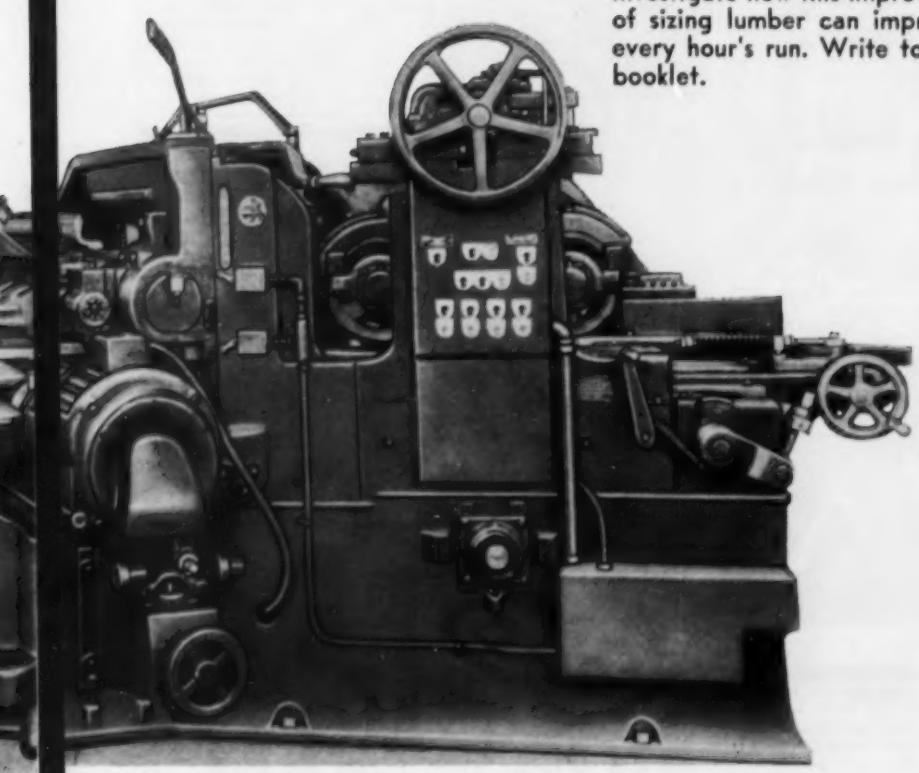
SMOOTHER FINISH

PRODUCTION INCREASE

REDUCED POWER CONSUMPTION



Investigate how this improved patented method of sizing lumber can improve your margin on every hour's run. Write today for the A-484M booklet.

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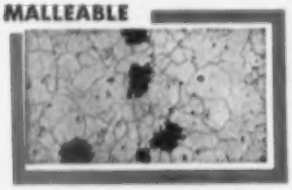
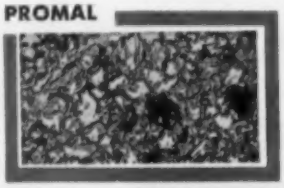
Promal chain specified to resist heavy loads and abrasive wear

LONGER SERVICE, LOWER CONVEYING COSTS are achieved through the use of Link-Belt Promal Class H pintle chain. Longer-wearing Promal prevents distortion of links under severe impact.

MALLEABLE



PROMAL



MICROPHOTOS show difference between ordinary malleable iron and Promal. Left—white areas in malleable microphoto represent "free iron" . . . black shows soft nodules of carbon. Right—dark areas in Promal structure show stronger, stiffer reinforcing material which strengthens metal; resists distortion, wear.

Specially heat-treated malleable iron provides extra wear resistance

Fewer conveyor shutdowns and minimized replacements are economies realized by users of Link-Belt Promal chain. Its greater strength absorbs continuous impact loads — and wear resistance supplies the durability to cope with severe abrasion.

Promal is more than a partially annealed or surface-hardened malleable iron. Developed by Link-Belt, this specially heat-treated malleable iron is actually transformed into a metal of radically different physical properties. Promal, because of uniform micro-structure throughout its whole section, provides greater ultimate strength, higher yield point, exceptional fatigue resistance and a remarkable capacity to withstand abrasive conditions.

For unusually abrasive or mild corrosive conditions, Promal chain can be furnished with "file-hard" surfaces. Copper bearing or special alloy content also available.

Where and how to apply Promal Chain in the lumber industry

Choose Link-Belt Promal chains for highly abrasive conditions (as with sandy bark) — for the extra strength and wear resistance demanded by heavy loads or long, sliding conveyors. They last much longer . . . cost but little more.

The wide range of Link-Belt chains available in Promal includes all types of cast and combination chains.

CLASS C combination chains for conveying and elevating combine cast center links with steel sidebars connected by steel pins. Rugged links with elliptical barrels provide extra metal for sprocket contact . . . straight tops and bottoms permit chains to be used for drag conveying. Accurately machined sidebars give full bearing area for pins.

CLASS H combination drag chain for refuse conveying can be turned over to double service life. Sides and barrels of links are cast integral to resist distortion. Rounded side of barrel offers proper sprocket contact, while the other forms a vertical pushing surface. Accurately machined pitch holes in steel sidebars assure tight press fit. Chain is available in four sizes.

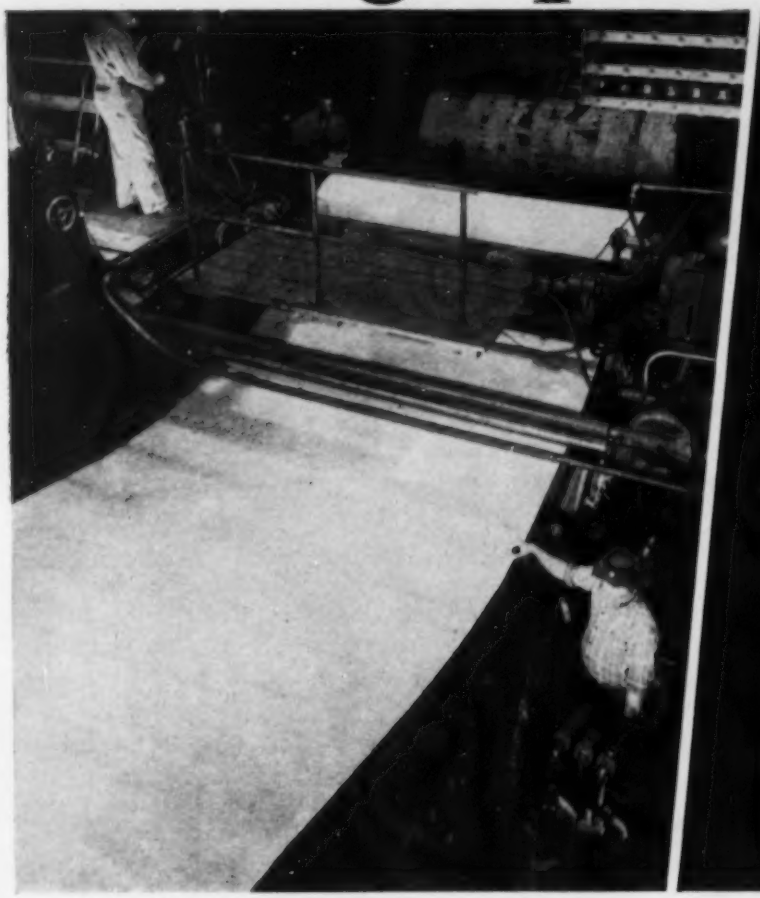
HEADQUARTERS for chains, sprockets and other Link-Belt conveying and mechanical power transmission products is your nearby Link-Belt factory branch store or authorized stock-carrying distributor.

LINK-BELT

CHAINS AND SPROCKETS

LINK-BELT COMPANY: Plants, Sales Offices and Factory Branch Stores at San Francisco 24, Los Angeles 33, Seattle 4. Sales Offices and Factory Branch Stores at Portland 9, Spokane 10, Oakland 7, Salt Lake City 1. Stock Carrying Distributors in Principal Areas. 14,758

Get high production



with sizeable and sustained profits from a

COE LATHE

Have you ever heard the sweet swish of a keenly ground 10-foot blade as it cuts through a good log at 400 feet per minute? It is a welcome sound to the skilled lathe operator whose keen ear is tuned to the pitch. He knows when his lathe is set **just** right, as mile after mile of veneer flows from his machine.

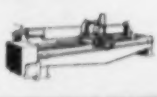
This same sound is sweet music to the Plant Manager, who knows that the fine timber for which he has paid top dollars will convert into high grade plywood and earn him the maximum profit. Good logs in a good lathe that **keeps** running at high speed is necessary to meet today's tough marketing condition.

Coe lathes are **designed** to do the job. Built by **skilled** machinists, they are a **plus factor** for profit.

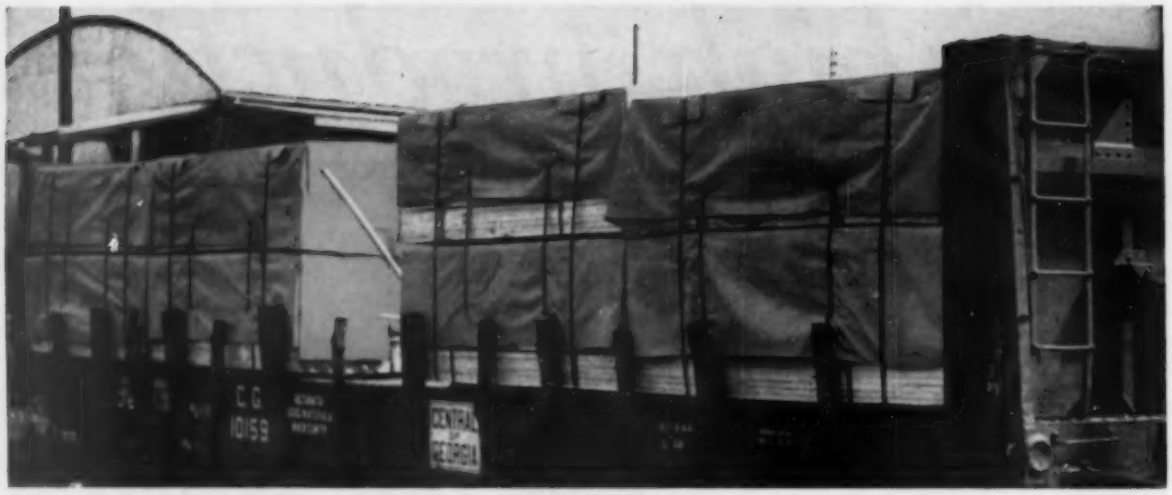
Do you have one in your plant?
Do you need one in your plant?

For replacement of an old lathe, or aid in selecting the best machine for a new plant the nearest Coe representative will welcome the opportunity to review your problem with you.

THE COE MANUFACTURING COMPANY
PAINESVILLE, OHIO



LATHES • CLIPPERS • DRYERS • KNIFE GRINDERS



IN TRANSIT

LOADING & UNLOADING

FOR STORAGE

SHIP PACKAGED LUMBER... Save Material Handling Costs... Storage Costs...for Your Customers

Yes, the mill that cuts its customer's costs is in a favored position. You are regarded as a supplier with the dealer's interest at heart — and abreast of modern developments when you ship your lumber on open cars — protected with FIBREEN! And remember . . . shipping on flat cars means tremendous savings in loading *and* unloading . . . packaging with FIBREEN protects the product from dirt and weather from your mill to the customer's door.

FIBREEN products are available in a variety of combinations . . . asphalt and non-asphalt laminants, flat and creped krafts and a selection of strengths. Most *any* widths are made to answer your problem. Prefabricated lumber covers are also available for packaging lumber. In certain applications, these covers mean easier and faster covering plus improved re-use characteristics.

Write us today at Attleboro, Mass., for your copy of our booklet "How to Protect Lumber with Waterproof Paper for Shipment and Storage."

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Volume 84 • Number 8 THE Lumberman LUMBER PLYWOOD BOARD WOOD MANUFACTURING JULY 12, 1957

Are You Paying Too Much Overtime?

By
ROBLEY D. STEVENS
Management Consultant

LOOK AROUND YOUR organization. Can you, right now, account for your overtime costs? Do you know how much your overtime costs have gone up in the past year? In fact, do you know exactly what your overtime costs are? If you don't, your management may be paying *too much* overtime and, in that case, it can be a heavy drag on your profits.

One thwarting discovery that employers in the forest products industries will make in auditing their payroll is that *overpayment* as well as *underpayment* in the compensation of personnel could be a real source of grievances and often unnecessary governmental investigation.

Yet, you may be paying a *larger* overtime bill than you really have to because you may be using the *wrong method* of computing overtime pay.

Employes in your firm who receive a higher rate than the statutory minimum should be paid at such higher rate on the basis of time and one-half that rate and not qualified as *exempted* in an executive, administrative or supervisory capacity, for all hours worked beyond 40 weekly. No particular accounting method is required. You may pay your employes on an hourly-rate, piece-rate, day-rate, or salary basis. In any event, wage-hour inspectors will be on the outlook to delve into all your accounting methods of computing overtime pay.

• Several different methods of computing overtime pay are permitted under the Wage-Hour regulations, but every employer in the Forest Products Industries must follow one or more of the methods exactly. How to do it is explained in this article.

The term "regular rate" is defined as to include ALL remuneration for employment paid to, or on behalf of, the employe, *except* payments of seven types specifically described later and commonly referred to as *statutory* exclusions.

Your employes may work any number of hours weekly so long as they are paid overtime. A workweek is a regularly recurring period of 168 hours — seven consecutive 24-hour periods, and need not conform with the calendar week and may begin on any day.

Now is the time to check up on your overtime pay practices. Not later on, when an inspector might audit your payroll books and allege that additional overtime pay is due your employes.

The best thing to do, of course, is to have your company accountant audit the payrolls, or, perhaps you may want to use the following quick check-list of common overtime pay methods.

Hourly-rate Employe

If an employe in your firm is employed solely on the basis of a single hourly rate, the hourly rate is his regular rate. For his overtime work he should be paid, in addition to his straight-time hourly earnings, a sum which is simply determined by multiplying one-half the hourly rate by the number of hours worked in excess of 40 in the workweek.

For example, a $1.40 hourly rate should bring, for an employe who works say 46 hours, a total weekly wage of $68.60 (46 hours @ $1.40 plus 6 hours @ 70 cents). In short, the employe should be entitled to be paid an amount equal to $1.40 an hour for 40 hours and $2.10 an hour for the 6 hours of overtime, or a total of $68.60.

If, however, in addition to the earnings at the hourly rate, say a bonus of $4.60 is paid, then the regular hourly rate of pay would be $1.50 an hour (46 hours @ $1.40 yields $64.40; the addition of the $4.60 would make a total of $69.00; this total divided by 46 hours yields a rate of $1.50). So, the employe should then be entitled to be paid a total wage of $73.50 for 46 hours (46 hours @ $1.50 plus 6 hours @ 75 cents, or 40 hours @ $1.50 plus 6 hours @ $2.25).

Pieceworker

If an employe in your company is employed on a piece-rate basis, his regular hourly rate of pay is computed simply by adding together his total weekly earnings from such piece rates and all other sources, such as bonuses and any sums paid for waiting time or other hours worked, except statutory exclusions. This sum should then be divided by the number of hours worked in the workweek for which such compensation was paid, to yield the piece-worker's regular rate for that week.

So, for his overtime work the pieceworker should then be entitled to be paid, in addition to his total weekly earnings, a sum equivalent to one-half this regular rate of pay multiplied by the number of hours worked in excess of 40 in the week. In short, *only* additional half-time pay is required in such cases since the employe has already received straight-time compensation at piece rates for all hours worked.

Day and Job Rate Employes

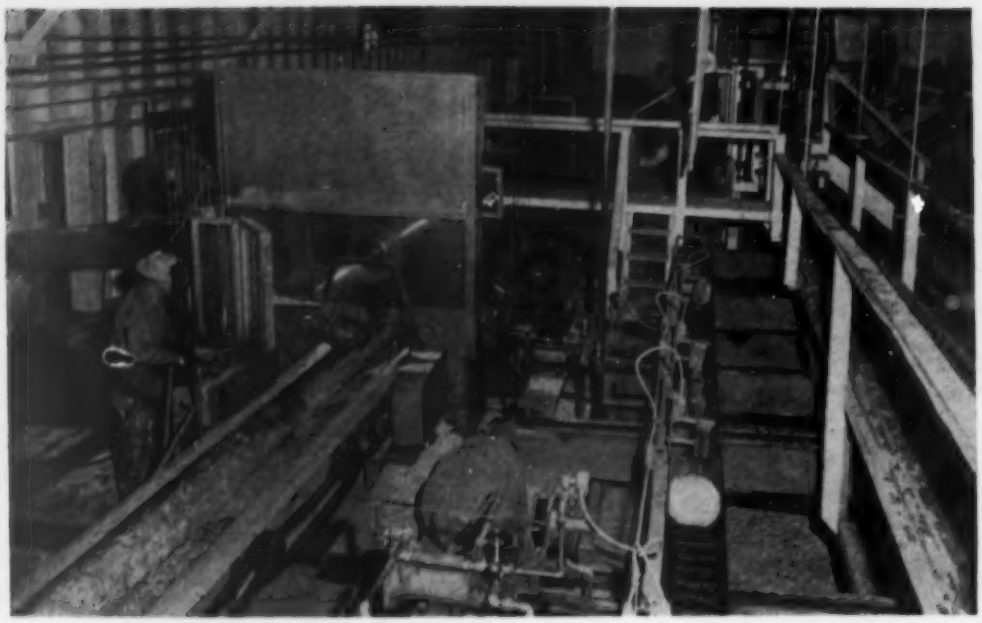
If an employe in your organization is paid a flat sum or for a day's work or for doing a particular job, without regard to the number of hours worked in the day or at the job, and if he receives no other form of compensation for services, his regular rate should be determined by totaling all the sums received at such day or job rates in the workweek and then by dividing by the total hours actually worked. He should then be entitled to extra half-time pay at this rate for all hours worked in excess of 40 in the week.

Salary Employe—General

If an employe in your firm is employed solely on a weekly salary basis, his regular hourly rate of pay, on which time and half should be paid, is simply computed by dividing the salary by the number of hours which his salary is intended to cover.

For example, if an employe is hired at a salary of $56 and if it is understood that this salary is compensation for a regular workweek of 35 hours, the employe's regular rate of pay is $56 divided by 35 hours, or $1.60 per hour, and when he works overtime

(*Continued on page* 84)



Cut-off Trims Logs To Length

FIRST STEP inside mill is cutting logs to length with circular cut-off saw on left. Saw is 54" and push-button controlled. Logs coming back on the right have been slabbed on all four sides.

CUT-OFF SAW is 54" and push-button controlled. Scored and center-tapered rolls advance the logs to any desired length. Counter balance on saw makes raising, lowering easy.

Mining Specialties Provide Market for Smaller Logs

Anaconda Company does big business making framing, wedges, tamping sticks.

ARTHUR W. AKERSON, plant foreman, holds a model of "stope set," showing how some of the timbers are used in a mine. Set can be built onto in any direction by adding another set and wedging timbers in place. Carload in background is strapped tunnel stock.

Framing Plant Produces Variety of Materials

Anaconda Company operates the framing plant and also the large sawmill at Bonner, Montana. The framing plant produces:

- **Sawtimber and framing stock**
- **Wood reels for copper wire and cables**
- **Round blasting sticks, 1⅛ inch in diameter and 12 feet long, used to tamp blasting powder in borings.**
- **Tamping sticks, one to 1⅛ inches in diameter and 7 ft., 6 inches long.**
- **Ladder sides and rungs. Rungs are 1⅛ inches in diameter; sides are 2 x 4's and 2 x 6's.**
- **Wedges (used in mine framing), about four cars a month. Cut from cull 2 x 4's.**

MINING OPERATIONS of Anaconda Company at Butte, Montana, consume about 65 per cent of the output of the company's new framing plant at Bonner, Mont. Overall production, including saw timbers and framing stock, totals 88 million board feet per year. Shipments of mine timbers total 75 to 80 carloads a month.

In a typical month the framing mill shipped 47,955 pieces of framing stock. These pieces varied in length from three feet, six inches to nine feet, and in dimension from 8x8-inches to 12x12 inches. All species except spruce are cut, but mostly Douglas fir, larch, and lodgepole pine.

Logs for the framing mill are sorted out of the general supply coming to the sawmill and are stacked in a dry deck. A Pettibone Cary-Lift takes them from here to the mill's live deck. Logs are washed under a low pressure nozzle as they are moved into the mill on an endless chain. Inside the mill logs are cut to length by a 54-inch circular saw, push-

Automatic Sorter

FOR DIMENSION and length. Pieces move down endless belt at right. Twenty-six steel fingers activate air kickers by solenoids, kicking stulls off endless belt to proper sorts. Stulls then move across the room to left on live chain conveyors to an endless belt coming back to the trim saws.

button - controlled and counter - balanced. Scored and center-tapered rolls advanced logs to any desired length.

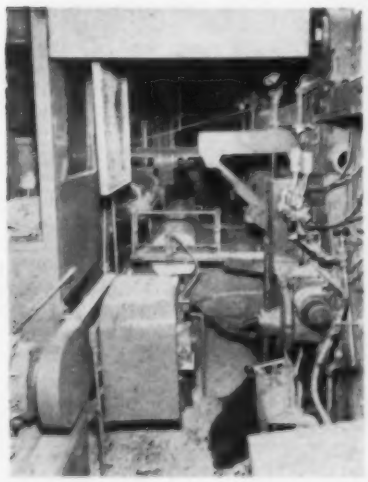
Slabbers: In line with the cut-off saw is the first of two Filer & Stowell slabbers. Each is equipped with two 54-inch circular saws, shifted by air cylinders. Two sides of the logs are slabbed in each one. Direction of logs is reversed by lateral transfer before they go into the second slabber. Timbers with waney sides are customary because of small size of logs used. This is permissible in mine timbers as only three flat sides are necessary.

Sorter: With all four sides slabbed, timbers move on an endless belt to an automatic sorter which sorts for dimension and length. Twenty - six steel fingers activate air kickers by means of solenoids, kicking stulls off the endless belt to the proper sorts. Live chain conveyors then move the timbers across the room to an endless belt going in the opposite direction and to the trim saws. Twin Filer & Stowell trim saws cut the timbers to accurate lengths before they go into the framer. These saws cut 950 to 1050 logs a day, or a scale of 55,000 to 60,000 board feet.

Framer: From the trim saws timbers move on an endless chain to position in front of the framer. A sliding frame moves against side of the timber, and two vertical steel fingers push the timber into the framer in exact alignment.

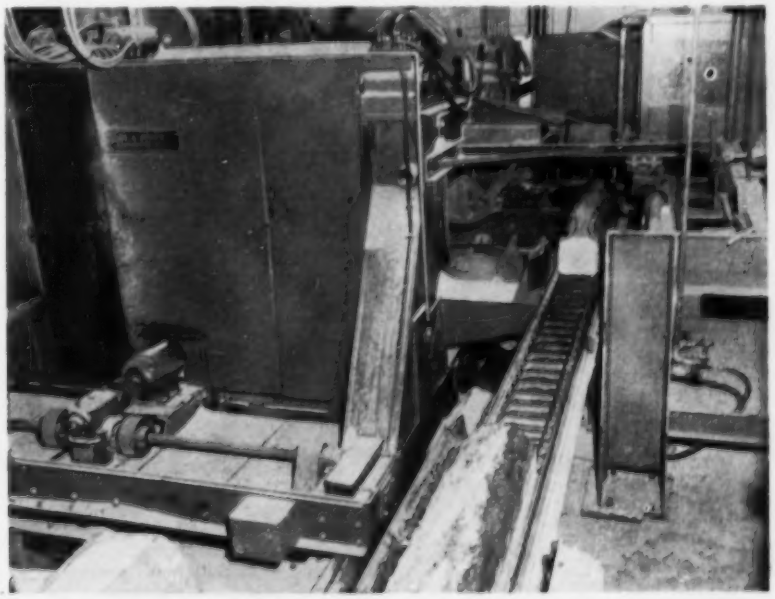
Conveyor, feed, and the framer itself are all operated by one man with a push-button control. The specially designed Filer & Stowell framer carries 17 adjustable circular saws, and frames both ends of the timbers simultaneously. Automatic adjustment of position of saws and the number which will be cutting makes it possible to frame all of the various types of mine timbers on this one machine.

Stacking: From framer timbers travel up a conveyor to an inclined stacking table. The table is lowered by the operator of the stacker so that

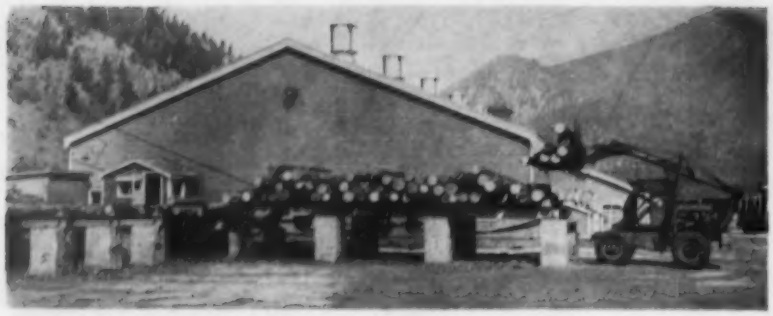


Framer Handles Stulls

STULLS MOVING toward camera and to Filer & Stowell framer. The two steel fingers against the left side of the stull will be advanced by operator at left and will push the piece into the framer shown at the right.

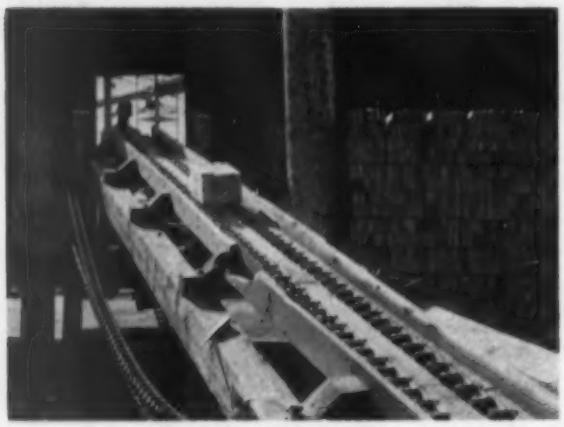


ENDLESS CONVEYOR chain taking stulls from trim saws to framer. Filer & Stowell framer on left carries 17 adjustable circular saws. Waney sides of stulls are OK, 3 flat sides needed.



LEFT PHOTO shows general view of framing plant from in-going end. Pettibone Cary-Lift supplies the live log deck. Photo at right shows a Clark-Ross lift truck carrying a bundle of "caps." Various sizes of mine timbers are made at this framing plant. Most of these timbers are shipped rough green. There are twenty pieces per bundle. They are strapped with Acme steel strapping.

Wedges Comprise Important Mining Item



WEDGES ARE BEING loaded into box car. Company ships about 4 cars per mo. There are 24 wedges per bundle, all cut from 2 x 4s. Plant runs wedges about 2 days each week. Bundles are drilled twice (through each stack of wedges) and the bundle is then wired through the holes. Bundle is somewhat flexible but cannot come apart in transit.

How Wedges Are Made

Usually a crew runs wedges only two days per week, but these add up to four cars per month. Cull 2x4s are cut into 12-inch blocks, length of the wedges, and then sawed on the bevel. Beveled wedges remain together until used. Two stacks of 12 wedges each are bundled together. (24 wedges per bundle). Bundles are then drilled twice (through each stack of wedges) and wired through the holes. This makes a somewhat flexible bundle, but it cannot come apart in transit.

All mine timbers are framed so they can be wedged into place, the wedges being driven between the timbers and the wall of the mine. Because of the irregularity of openings many wood blocks are used in addition to wedges, and in conjunction with the wedges. About five carloads of these random length blocks are produced each month.

the timbers automatically fall into place to make a package. Each bundle contains 20 pieces, stacked four high and five wide. Bundles are then strapped with .026X3/4-inch Acme steel strapping. Operator uses an air tightener and hand crimper. Each bundle of timbers is strapped twice.

A Clark-Ross lift truck carries bundles to the storage and shipping yard. Most of stock is shipped rough-green. Loaded on flat cars, bundles of timbers are held by extra long 2x6 stakes.

Many materials can be utilized for the mine which cannot otherwise be manufactured at a profit. Because of the permissible waney sides, small logs and "inferior" species can be utilized, making an excellent market outlet for many holders of small timber.

British Columbia Mill Starts Initial Production

The Parson unit of the Crestbrook Timber Ltd. located 160 miles north of Cranbrook in British Columbia, swung into high gear when production at the new and unique plant went into two-shift operation.

The payroll has risen to 62 men, with 10 more to be added as the new scrag mill and horizontal re-saw go into operation.

A distinctive feature of the plant is the high platform mounting of the widely separated five production sections, linked by belts to combat problems of heavy snow and fire risk.

V. C. Brown, Crestbrook vice-president and general manager, reports clean-up of the Spillimacheen River log drive from last year is well under way and will end forever the water conveyance of logs from the company's forest management license area.

Some six million feet of stranded logs have been put back in motion in the top 18 miles, and high water is accelerating the clean-up below this toward the point where the river joins the Columbia, three miles above the Parson plant.

Jack Snider, Parson division woods superintendent, heads the river crew of seven men and two bulldozers. Over the next several weeks of high water, they will continue the clean-up to the Spillimacheen mouth, then collect the accumulation of pockets and backwaters of the Columbia.

About the end of June, trucking over the high standard gravel access roads into the management area, built by the company last year, started to bring down the several million feet of logs decked there in last season's operation. Steady production in the woods, and full operation of the five-unit plant at Parson went into swing, as planned a year ago.

A fire just a year ago demolished the Parson plant, disrupting the production schedule. Portable mills were used temporarily while the new plant was being constructed, but an early December snow closed down all production for the winter in the woods and at the plant.

E. H. Nettleton is logging manager for the Parson plant, with Henry Dimeling the new plant manager and Jim McLeod the day shift foreman.

How Front End Stackers Serve Mill Areas

FAST FINDING FAVOR among millmen are the various types and models of fork type machines with front end attachments for handling logs. With a trend toward pondless sawmills in many regions, this type of machine has great utility in unloading log trucks, placing trailers on truck for return trip to woods, decking and undecking logs and feeding live decks on mills.

Shown here in action is an R. G. LeTourneau electric log stacker recently put into service by Arcata Redwood Co. at its Orick, Calif. salvage mill. The machine "does the work of five men", has done 30 per cent more work with only the one operator.

MACHINE CARRIES LOGS to the crew which barks redwood logs.

ELECTRIC LOG STACKER takes "big bite" of heavy redwood logs.

IT MOVES partially barked logs around so crew can finish job.

UNBARKED LOGS are carried to big cold deck for storage.

LOGS ARE BROUGHT from deck to the barking area, shown here.

STACKER BRINGS barked logs to live deck of the sawmill.

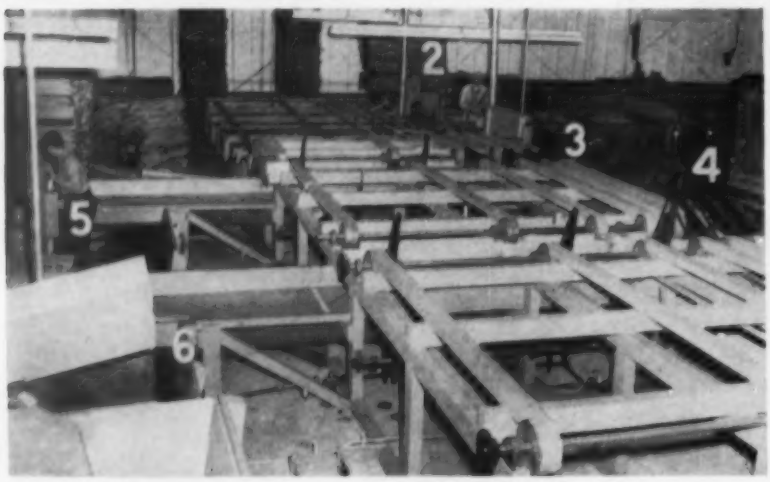
Firm Makes Big Boards From Little Boards By Finger-Jointing

End and edge gluing recovers more values from redwood lumber at Arcata Redwood Co.

ANOTHER MILL in California's utilization conscious Redwood Region finds edge and end gluing of too-narrow and too-short lumber pieces an economical recovery system for these normally unusable items.

Arcata Redwood Company at Arcata, California started its new finger jointing and edge gluing department in August, 1956. It's under the supervision of Joe DeFino, with Robert Morrison as millwright. Seventeen men are employed on the floor.

Housed in a 110x200 foot building, the plant's normal daily one-shift output is about 6000 board feet of end glued stock and 8000 board feet of edge-glued stock. All raw material is redwood, which comes from the green conveyor in the sawmill and also from the dry sorter.



LOOKING INTO PORTION of production system at Arcata Redwood Company. No. 1, Mann-Russell glue applicator for edge-gluing. No. 2, two Irvington trim saws for cutting out defects. No. 3, first of two pockets on conveyor leading to straight line rip saws. No. 4, second pocket to rip saw. No. 5, first Mattison straight line rip receives the stock from pocket 3. No. 6, second Mattison straight line rip receives the stock from pocket 4.

Green stock is sawn to one inch thickness and then kiln dried. Stock selected is by products from regular sawmill production, mostly trims. Anything that will make at least a 3 by 16 inch piece is accepted, but nothing wider than 10 inches is used.

Raw material reaching the finger jointing department comes from the dry kilns at about 10 per cent moisture content.

PRODUCTION PROCESS INVOLVES the following steps:

- Stock goes through a single surfacer which sizes to 29/32 inch on one side only.
- It discharges on a rubber belt and feeds by an air-operated limit switch controlled split feed to two semi-automatic air-operated trim saws. Defects are trimmed out and piece is cut to any random length, but not over four feet long.
- Stock feeds out on a 60 foot conveyor table, with two drop-out pockets. Each feeds to a straightline rip saw equipped with hydraulic width

(*Continued on page* 40)

Principal Equipment

(In order of appearance in production process)

FOR FINGER-JOINTING

Orton D1 single surfacer; two **Irvington** air operated trim saws for defect trim; two **Mattison** 202 straightline rip saws, with hydraulic width guage and console controls (**Vickers** pump driven by **Westinghouse** Life-Line motor actuates hydraulic system); **Fafnir** bearings on slat conveyor table from rip saws.

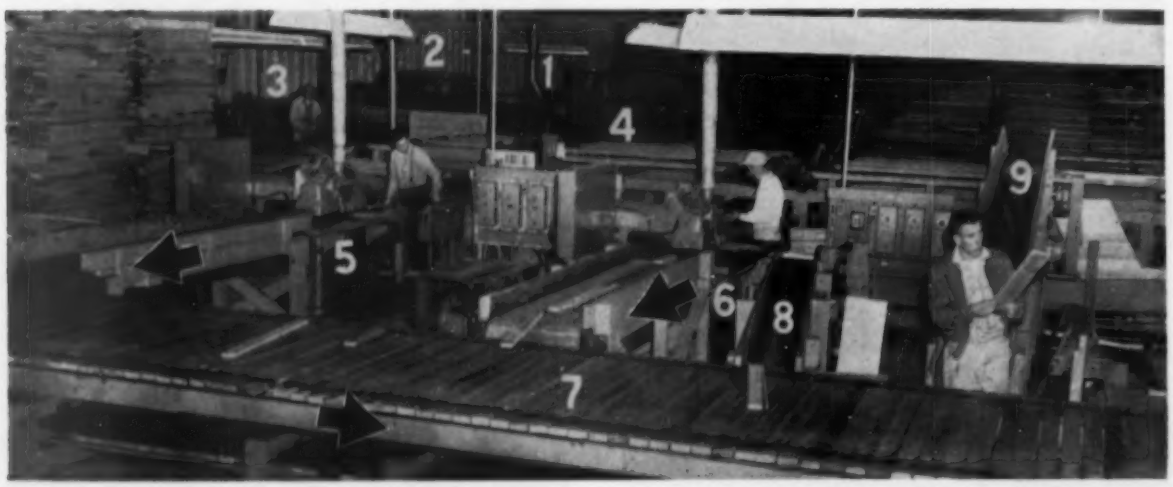
Two Randall Fenton end matchers for finger jointing; **Mann-Russell** electronic moisture detector; **Mann-Russell** glue applicator; **Mann-Russell** (model 500) 15 KW output, electronic press for glue setting; Randall Fenton air operated cut-off saw.

FOR EDGE-GLUING

Mann-Russell glue applicator; **Mann-Russell** (model 700), 20 Kilowatt output, electronic press for glue setting; **Mattison** 202 straight line rip saw with shadow line guide but without hydraulic width control, equipped with **Mann-Russell** electronic moisture detector on outfeed.

OTHER EQUIPMENT

Schram model 105 air compressor; **Montgomery Ble-Hog** driven by 30 hp motor; **Eureka Boiler Works** air tank.



NUMBER 1 is Orton D1 single surfacer. No. 2, Mann Russell electronic press for edge-gluing. No. 3, one of two Irvington trim saws for cutting out defects on surfaced stock. No. 4, conveyor belt from trim saws feeds two rip saws from two pockets. No. 5, first of two Mattison 202 straight line rip saws with hydraulic width control operated from console. No. 6, 2nd Mattison rip saw. No. 7, slat conveyor to drop sorter. No. 8, refeed to rip saw (No. 6). No. 9, conveyor carries reject stock to hog, which prepares it for boiler fuel.

Drop Sorter Automatically Separates Stock by Width

STOCK FROM slat conveyor, right, drops on V-belt running along top edge of 80 foot long sorting table, is carried along until proper raised lug on metal backplate kicks it on table.

CLOSEUP OF one of lugs which automatically kicks off stock according to width.

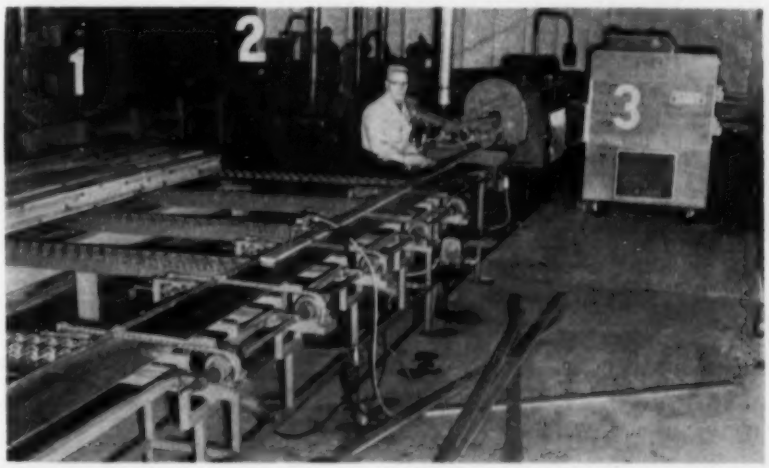
Automatic Drop Sorter

The drop sorter automatically segregates ripped stock by widths after it leaves the two straight line rip saws.

It consists of an elevated metal table, 80 feet long, with slanted metal backdrop on one side. Top portion of backdrop carries a metal trough, in bottom of which runs a rubber V-belt the length of the sorter, driven by two hp. motor. On this outward tilted backplate, above V-belt, are a series of metal lugs placed above V-belt at varying distances to provide kick-out of lumber pieces in widths from two to ten inches.

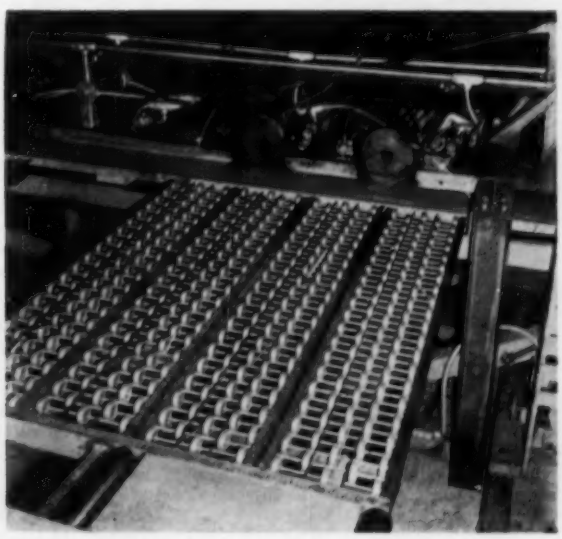
Lumber pieces drop on edge onto V-belt after they leave slat conveyor from rip saws, travel along until they hit a lug, which tilts them away from backplate and spills them on sorting table. Ten inch width is at beginning end of sorter; two inch at far end. Offbearers then hand sort the width-graded stock by three quality grades.

Finger Jointed Stock Becomes Long Boards



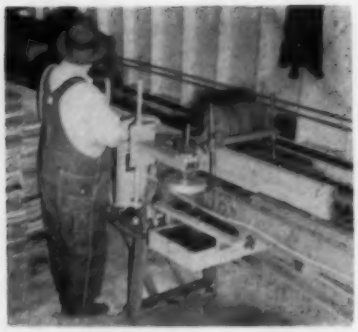
RANDALL FENTON cut-off saw trims finger jointed stock to length. No. 1, first Randall Fenton end matcher. No. 2, second end matcher with Mann-Russell electronic moisture detector ahead of it. No. 3, Mann-Russell electronic press sets glue line on finger jointed stock.

SINGLE SIDE surfaced stock from Orton D1 surfacer arrives from left (bottom photo), goes to two Irvington air operated trim saws for defect trimming. Any length is cut. Photo at right shows limit-switch controlled air-operated kick-off device which feeds stock to both trim saws from surfacer's conveyor belt.



Edge Gluing Process Builds Panels from Boards

OUTFEED END of Mann-Russell electronic press model 700, which sets glue line on edge glued panel. Press accommodates widths to 52"; most panels made are from 12" to 24" wide.



GLUE APPLICATOR on feed end of press. Mann-Russell unit applies glue on bottom edge. From two to four boards can feed through this unit at one time.

PHOTO-ELECTRIC eye (arrow) on conveyor leading from glue applicator stops boards automatically. The forming table for electronic press is located at top of the photo.

(*Continued from page* 38)

guage and console push-button controls.

• From the rip saw stock discharges on a 35 foot long slat conveyor. This has a refeed to the second rip saw and a belt for diverting reject stock, which is fed to a hog (see picture).

• Acceptable stock passes out on an 80 foot long automatic drop sorter. This makes separations in widths from two to ten inches. Additional separations for A, flat clear and vertical clear grades are made by hand by two offbearers who stack the pieces in segregated stock piles.

• Pieces are finger jointed on both ends in two end matchers arranged in conveyor-belt-linked production sequence. A piece is fed through one end matcher which puts on the first finger joint, passes through an electronic moisture detector which rejects anything over 12 per cent moisture content and then goes through the second end matcher for placement of the opposite joint.

• An automatic glue applicator is on the discharge side of this second machine. An offbearer takes glue-applicated stock, joins it on a belt conveyor which feeds through an electronic field for curing. Setting is done while the stock travels as a continuous piece of lumber.

• The "endless" piece of finger jointed stock is cut to length with an air operated cut off saw. Stock is then segregated by lengths for the edge gluing process.

• Finger-jointed stock to be edge glued passes on edge through a roll type glue applicator, which applies glue on the bottom edge. Two to four boards can be fed through at one time. Odd width longer lumber strips not finger-jointed are also fed through here, after being rip sawed on a separate machine to get a true edge.

• An "electric eye" control stops boards at other end of glue applicator line, at head end of forming table leading to the electronic glue setting press. Here boards are formed into panel widths for feeding through the machine.

Electronic press handles panels up to 52 inches wide. Most of the output is in panel widths from 12 to 24 inches, but the full 52 inch table is used to make up several such panels at a time.

• Panels are then sent to planing mill for surfacing.

Defect Trim Saws

The single surfacer feeds its stock onto a 30 inch rubber belt conveyor leading to two air operated defect trim saws, one on each side of the conveyor.

A split feed arrangement sends stock to each saw. Stock is automatically kicked off conveyor belt onto a sloping set of roller coasters leading to the trim saw feed, by an air operated device. The board hitting a bumper plate on the end of the conveyor actuates a limit switch which impulses a series of four air operated round metal push plates that kick the board off the conveyor belt onto the coasters.

Simpson Establishes Central Research Lab.

• A Simpson central research department to work on company-wide projects in Washington, Oregon and Northern California operating areas has been organized. C. H. Kreienbaum, vice chairman, Simpson Timber Company, will head the new department in Seattle, Wash.

William A. McKenzie has been named chief engineer of Simpson Timber Company after having served as head of the Simpson Paper Co. engineering department at Everett, Wash., since July, 1954.

Besides engineering, Simpson central research will deal with company-wide forestry and marketing projects and with chemical research in pulp and paper at Everett, and at Eureka, Calif. It will coordinate planning and development work in these fields and assist foresters, engineers, research staffs and marketing personnel in the Simpson Logging Co. operations in Washington and in Oregon, and Simpson Redwood Co. in California.

Jobbers Review Selling Problems

A note of seriousness pervaded the three-day meeting of the National Plywood Distributors Association 15th Annual Convention held in Chicago, Illinois, June 13, 14, and 15. Under the guidance of President Earl G. Thuresson, Associated Door and Plywood Co., Chicago, 250 delegates sought some of the answers to what is right and what is wrong with the plywood jobbing business. With plywood production 300% or more of what it was six years ago, jobbers who have maintained their volume evenly over the six years, have still lost much of their position, as far as the percentage of production is concerned. The situation of the independent plywood jobber has progressively deteriorated over the last six years.

These facts and many others were brought out by keynote speaker Arthur A. Hood, editor of "American Lumberman". Material for the discussion was the result of questionnaires sent to the membership to uncover: what is wrong in the current picture, and to uncover what might be done about it.

Basic problem is wide-spread inability to sell a satisfactory volume of plywood at a profitable price. Of the causes mentioned in the replies, 84% are in the area involving:

- Producer's distribution policies.
- Competition.
- Price.

Sixteen percent of the answers were in a general area as follows:

- Not enough research and promotion.
- Over-production.
- Lack of salesmanship and real hard selling.
- Dealers do not appreciate value of wholesaler.
- Confusion of grade and lack of uniform quality.

Mr. Hood indicated that plywood sales can be doubled, but further admonished the dealers to, "Be sure that what you ask for is morally right". The question was then put to the dealers, "What are you going to do to help the wholesalers move the products you have sold them?" Hood concluded with the statement that doubling home-improvement programs alone would solve the plywood industry's problems.

A shirtsleeve panel assigned to discuss "Where to Cut Expenses, Where to Widen Margins, and Where to Increase Sales" rendered the following conclusions:

- Profits are going to come from greater efficiency.
- Sales is a key structure, as cost of doing business does not grow in proportion to volume sold.
- High-profit items are usually low-volume items, therefore, eliminate low-profit items and emphasize high-volume, good-profit items.
- Jobbers do not want an *advantage*, but a *quality product*.

W. E. Difford, managing director, Douglas Fir Plywood Association, Tacoma, Wash., told the jobbers they have not exhausted the possibility of loading dealer's inventories. "There are still a lot of places where people do not know the story of plywood", Difford said, and pointed out that many jobbers themselves do not know the complete story of plywood—such facts as split-proof, nail holding, shear strength, etc. "If you do not know what you are selling, how can you sell it?" Difford asked. Difford's threefold conclusion was:

- Price will not solve the selling problem—you must have demand.
- You do not make money by buying, but by selling.
- One answer to the problem could be "Unit Costing". Do not discount every item on the same basis.

An even closer look at the situation was had through the medium of a seven-man softwood plywood panel. Three of the more pertinent facts disclosed by this panel were:

- Seeking further discounts tends to tear down markets. This is also true of indiscriminate granting of functional discounts.
- Part of the problem is losing markets to other materials.
- Many dealers are trying to stay in business with no inventory. Consequently, the material stays in the jobber's warehouse.

New Officers

President: Albert Hersh, Industrial Plywood, Jamaica, L. I., N. Y.

First vice-president: R. R. Remmell, Southland Building Products, Little Rock, Ark.

Second vice-president: William Fahs, California Panel Co., Los Angeles, Calif.

New directors. At large: Stewart White, Georgia-Pacific, Olympia, Wash.; John Goetz, Atlas Plywood Corp., Boston, Mass. FOR THE EAST, William Renn, Renn Plywood, Jenkintown, Pa. FOR THE MIDWEST, Henry Dahlquist, Dahlquist Sales Co., Detroit, Mich.; Thomas H. Hammer, National Plywoods, Inc., Chicago, Ill. FOR THE SOUTH, Jack Walker, United Plywoods, Birmingham, Ala.; Joseph Gray, Dixie Plywood, Tampa, Fla. FOR THE WEST, Floyd Yates, Southwest Plywood, Los Angeles, Calif.; Art Lundgren, Lundgren Dealers Supplies, Tacoma, Wash.

New Office for NPDA

The office of NPDA was moved from Chicago, Ill. to Portland, Ore. effective July 1.

Mr. Charles E. Devlin continues as secretary-treasurer in the new location.

FROM LEFT: newly elected president of NPDA Albert Hersh; retiring president Earl G. Thuresson.

GEO. L. WAETJEN
Scroll of Honor Award

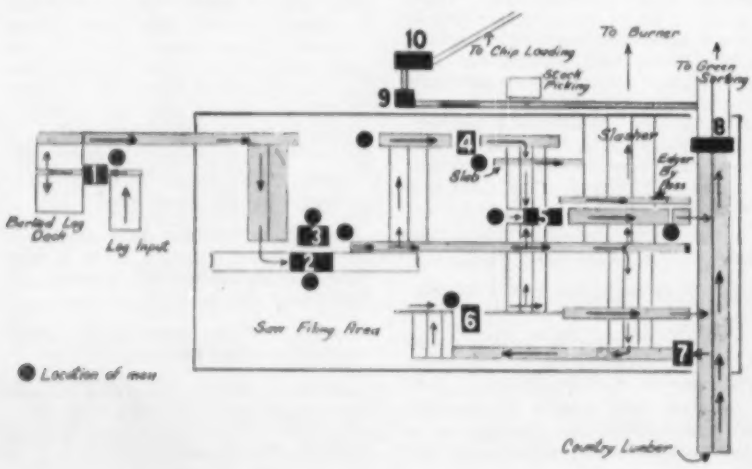
Award of Scroll of Honor

The Scroll of Honor was awarded to George L. Waetjen of Milwaukee. Waetjen, 75 years old this year and the oldest plywood distributor in the business. He was the first plywood dealer in the United States to sell the product exclusively, having started selling hardwood plywood in Milwaukee in 1908. At that time there were only five mills producing plywood on the west coast. Waetjen said he had to guarantee that the product would not come apart. They had only two kinds of glue in those days—hide glue and bone glue. Waetjen said he had to convince the mills themselves that the product was a good one.

Waetjen retired in 1954, but during the 46 years he was active he saw the complete evolution of the plywood industry. He was one of the organizers and original charter member of the National Plywood Distributors Association. Always very active in civic and fraternal activities, Waetjen also organized and headed the nation's first home show, and was president for 10 years in Milwaukee.

OPERATING FLOOR of A. DeWeese Lumber Co., Philadelphia, Miss. shows principal lumber flow. Cants come from the headrig roll, (arrow) and go through an Esterer HD30 cant gang (No. 1), then through Cunningham edger (No. 2), on out to the trimmer table. No. 3 is a Moore Dry Kiln Type C Swede which pulls the incoming country lumber for feeding to the vertical resaw.

NUMBER 1 is slab feed to slasher (No. 6). No. 2, edger bypass. No. 3, Cunningham edger. No. 4 is edger tailer. No. 5, trimmer. Arrow indicates the feed from the vertical resaw.



Principal Mill Features

• It cuts 45 per cent of company's annual production, instead of previous 25 per cent, thereby replacing two portable sawmills.

• Eight men on the floor turn out 5500 bd. ft. per hour.

• Mill has a separate remanufacturing side receiving portable mill lumber (about 55% of mill output) which joins regular mill flow.

• Mill is designed to add horizontal resaw.

• Complete utilization is obtained with barking and chipping facilities.

Principal Equipment

(Numbers refer to flow chart)

NO. 1, **Soderhamn** 66 Cambio barker, 26 inch unit, with two-way flipper on log deck; NO. 2, **Wheland** No. 401-42A three block carriage, with electric setworks and air dogs; **Wheland** 10 inch shotgun feed; NO. 3, circular 64 inch solid tooth circular saw headrig, driven by 200 hp. motor; NO. 4, **Esterer** HD30 cant gangsaw driven by 150 hp motor.

NO. 5, **Cunningham** four-saw edger; NO. 6, **Yates** 54 inch vertical resaw; NO. 7, **Moore Dry Kiln** Type C Swede, which pulls lumber from ¾ inch to 4 inches; NO. 8, jump-up trimmer; No. 9, **Soderhamn** HF60 chipper with **Soderhamn** CS35 screen; NO. 10, **Phelps** 58 Model R blower, powered with 60 hp motor; blast wheel is 42x12 inch, with feed having a 32 inch dropper wheel discharging into 18 inch pipe.

Other Equipment

Pettibone-Mulliken Cary-Lift; **Worthington** air compressors; **Hanchett** 72 grinder; **Covell** circular saw grinder; **Vollmer-Werke** gang saw sharpener; **Covell** #82 tensioner.

YEARS OF PLANNING are reflected in the new sawmill of A. DeWeese Lumber Company at Philadelphia, Mississippi, manufacturers of southern lumber since 1897. The company is operated by Tom DeWeese as president and Pete DeWeese as vice-president, with Edwin DeWeese and Mrs. Horace Turner on the board of directors.

Richard C. Allen, forester, heads up the company's unique DeWeese "Tree Farm Family Plan" of sustained yield operations on over 150,000 acres of woodlands, in tracts of from 18 to 18,000 acres, owned by over 150 individuals and located in seven counties in central Mississippi. Some 38,000 acres are controlled by the company and DeWeese family.

The new all-electric sawmill, completed in early 1956 at a cost of about $250,000 for machinery, equipment, supplies, building and labor, reached its paper goals of production after about four weeks of operation.

The old mill cut about 3,000 board feet of lumber per hour, which was 25 per cent of the annual production of 23 million feet. The remainder was produced by seven or eight contract operated portable sawmills.

THE NEW MILL CUTS about 6000 board feet per hour, or about 45 per cent of the annual production, with the same number of men on the floor, eight. Extra mill cut replaces about two portable mills.

Additionally, it recovers more lumber from logs and also recovers chips from milling residues, in itself an attractive production item.

Production is about 80 per cent pine and 20 per cent hardwoods, mostly oak and gum. The mill runs about one day a week on hardwoods.

Average log scale input is about 37 board feet, Doyle log rule, with the average log 10½ inches in diameter and 14 to 16 feet long.

VIEW FROM TOP of log haul, showing Cambio 66 (26") Soderhamn barker, with two way flipper for storing barked logs. Pettibone Cary-Lift shown in distance handles the log supply.

New Mill Gains Increase in Hourly Production

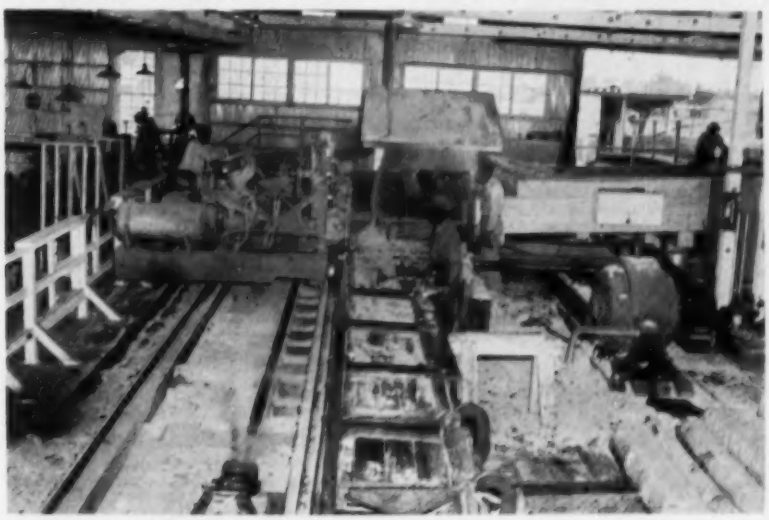
A. DeWeese Lumber Company in Mississippi handles portable mill lumber and regular log input.

Mill operation and production components are shown in the accompanying flow chart and list of principal equipment. Unique feature of the mill is provision for the acceptance of a daily flow of 50,000 to 60,000 board feet of country lumber (produced by portable sawmills) as cants at the back end of the mill. This lumber, accounting for 55 per cent of mill output, enters via chain and mechanical Swede, goes through a vertical resaw and then passes over the same trimmer and green chain as the headrig-produced lumber.

Other mill features:

- Log deck to barker is air operated, as is log deck in mill, which is automatic.
- The barker operator is in elevated position, about halfway between the barker on ground level and the

IN FOREGROUND, Phelps 58 Model R blower with 60 hp. motor. In background is Soderhamn HF60 chipper with Soderhamn CS35 screen. Chips go 485' to 2-way chip loader.



HEADRIG in A. DeWeese mill is 64-inch circular, driven by a 200 hp. motor. Carriage is a 3-block Wheland No. 401-42A, equipped with a Wheland 10-inch shotgun feed.

How DeWeese Handles Country Lumber in Mill

INCOMING LUMBER is brought to unloading platform by carrier and is then placed on transfer chain loading into the sawmill.

LUMBER IS PULLED from chains automatically by Moore Dry Kiln Type C Swede, in thicknesses ranging from ¾-in. to 4-in.

YATES 54" vertical resaw receives lumber from feed rolls leading from Swede in distance and discharges stock either to edger with one-way sweep or sends it direct to trimmer table.

mill floor above him. This puts him in position to reach either area quickly, as in case of log fouling on the deck. The barker easily keeps ahead of mill output. This, plus push button control of the barker, gives the barker operator ample time to act in a dual capacity.

• Heavy duty two-way flipper at outfeed end of barker flips to one side a reserve of barked logs.

• Edger tailer controls two way flipper and bumper, which enables him to direct slabs to slasher chains and two-inch flitches for resawing to transfer chains leading to resaw. Vertical resaw thus supplements headrig in part.

• Mechanical Swede automatically brings to vertical resaw two inch and one inch lumber from portable mills requiring resawing.

• A fast one-way sweep at resaw out-feed feeds lumber to edger.

• Shorts are picked out for ripping on a conveyor leading to the chipper (from the slasher) for kiln drying, to make end matched pine flooring and toy stock. Pieces 18 inches and longer are selected.

A high speed horizontal resaw, with fast set works, is planned tentatively to replace the vertical resaw. This machine, with run around and extra man, should increase mill output considerably.

Chip Production

Pine chips are consigned to International Paper Co. at Mobile, Alabama. A. DeWeese also acts as wood dealer for International and Flintkote Corporation.

Hardwood chips go to Masonite Corp. at Laurel, Miss. Oak has to be chipped separately because of acids in the wood. Other hardwoods can be mixed.

A test run of pine chip production from February 28 to March 27, 1956, gave the following production data

Pine lumber sawn in sawmill 2/28 thru 3/27 —678,688 bd. ft.
Other pine timber trimmed from portable mills on same dates—580,770 bd. ft.
Log scale of lumber above sawn in mill—486,559 bd. ft.
Over-run—39.5%.
Log average—37 bd. ft.
Chips produced during this period - 994.3 tons at $6.10—$6065.23.
Income per thousand feet of lumber sawn on mill—$8.94.
Income per thousand feet of logs thru mill —$12.47.
Tons of chips per thousand feet of lumber sawn—1.465 T.
Tons of chips per thousand feet of log scale —2.044 T.

Brooks-Scanlon Details Remodeling Plans

The $2.7 million remodeling job recently announced by Brooks-Scanlon, Inc., Bend, Ore., will be primarily concerned with lumber processing and shipping from the green chain to boxcars. Highlights of the project in which $2 million will go into new buildings, $700,000 into equipment are:

• Removal of all operations from the north end of the present plant to the south end of the property, in the Mill B area.

• Construction of a new green chain and a new planing plant.

• Building of a new loading area and eventual handling of all lumber by crane.

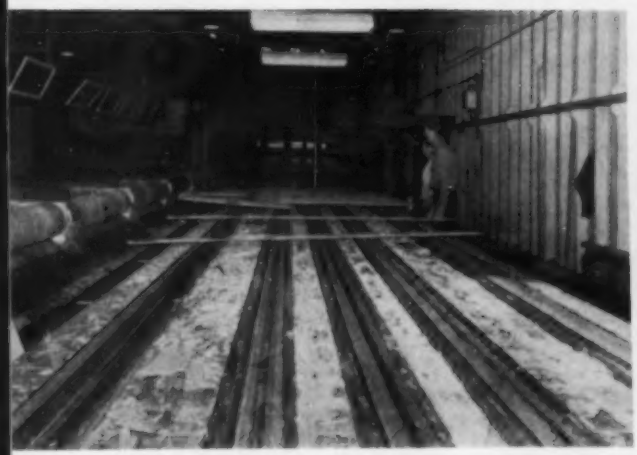
Also, a 100x320-foot heated garage for maintenance of automotive equipment is to be built and the powerhouse modernized. The program is expected to be completed early in 1958 and will probably be followed by a barker and chipper installation.

Company officials stress that the project is in no way connected with pulp plant being considered by the firm. Freeman Schultz, vice-president and general manager, says "the only possible connection is that this sort of work would have to be done before we could build a pulp plant here. The modernization work would have to be done anyway in order to make us competitive on today's lumber market."

The modernization project will allow the company to merchandise its lumber products more effectively, Schultz said, and will allow it to undertake new processes as they become feasible. Improved packaging and shipping processes will be installed immediately.

Fire Destroys Kilns

Fire in mid-June destroyed the dry kilns and drying sheds of the Fall Creek Lumber Co. southeast of Springfield Ore. Damage may go as high as $500,000.



SORTING chain at Woodard, left, showing puller rolls. Above, view of the 10 sorting bins. Note mirrors above and pull cords. Below: Cart rolls out on tracks, returns when load is removed.

Automatic pullers are

Simplifying Green Chain Sorting

AUTOMATIC sorting on the green chain at the new W. A. Woodard Lumber Co., plywood plant at Cottage Grove, Ore., permits four men to sort the veneer for production of 125,000 square feet of plywood daily.

Ten sorts on the 78-foot green chain are each served by a rubber and steel roll combination which pulls the sheets into the carts as they are fed from the sorting chain. A mirror placed overhead, behind the carts, enables the pullers to feed veneer for even stacking. Each set of rolls is 66 inches long.

The steel stacking carts have plywood spacers between them. The spacers are permanently anchored to the floor and keep the loads separated. The carts are rail-mounted and are kicked out by an air-cylinder. When a cart is filled, the Towmotor lift truck operator picks up each stack for transfer to the dryer.

It is unnecessary for the lift driver to leave his truck. He pulls an overhead rope connected to a solenoid which in turn actuates the air pusher cylinder that shoves the cart out into the aisle. As the load is removed from the cart, the lift operator pulls an adjoining rope which activates the air cylinder and pulls the cart back into the bin in loading position.

The idea for the improved, fast handling puller system was developed by Woodard and Kimwood Machine Works, also of Cottage Grove. The latter has patented the system for manufacture.

ANOTHER version of the system, with a more simplified cart system, is in use at Fir-Ply, Inc., at Medford, Ore. Plant engineer Arthur Mickelson designed the automatic pullers which enable four men in two shifts, to do the sorting formerly requiring 10 men.

Six carts and sets of rolls are in use. The top roll is 58-inch and the bottom roll is 60 inches to allow for expansion should the veneer be creased. The compartments into which the veneer is fed are tapered, 61 inches in front and 65 inches at the back. This is to prevent stacks from binding in the bins.

Stacks are built on dollies placed in each compartment. Each dolly rests on a company-built hydraulic lift. As each sheet of veneer is pulled onto the cart it hits under a flap that serves the dual purpose of slowing the sheet in striking the back of the compartment, thus preventing veneer edge damage, and also drops the lift a course at a time.

AUTOMATIC puller bins at Fir-Ply. Carts are tapered 61 inches front and 65 inches back. Veneer hits slowdown flaps as fed through rollers. Stacks on dollies on hydraulic lifts.

ONE OF LARGEST treating plants in world, Dierks Industries operation at DeQueen, Ark. has five 8 x 110 ft. cylinders. Treated poles and posts can be seen in the foreground.

Treating Plant Produces Millions of Posts Annually

Operating one of largest plants in world, Dierks Industries treats posts, poles, piling, timbers, fabricated lumber.

UNPEELED SOUTHERN pine posts are handled by Cary-Lift unit equipped with a swivel clam.

Two Types of Machines Handle Material Around Plant

SORTED POSTS (shown below) are strapped with Acme ¾" steel bands before being removed from racks by Gerlinger lift truck. There are four Gerlinger lift trucks at the plant.

THREE BARKING METHODS USED

Three different techniques are used for debarking posts, which are from 6 to 14 feet long and 2 to 10 inches in diameter:

- **Two Nelson Junior units remove bark and projecting knots with cutter heads as posts are rotated on their way through the machines.**
- **Other posts are freed of bark by tumbling in three large rotating drums.**
- **Newest equipment is a Sodderhamn Cambio continuous-feed machine, which moves debarking tools around the posts as they travel through the unit.**

MORE THAN FOUR MILLION treated posts are produced annually by Dierks Industries at De Queen, Ark. All of them and most of the other round material processed there are products of the firm's forest improvement on its own holdings. The pine posts, poles and piling are debarked at the plant with a variety of equipment.

Foresters selectively mark the material to be cut for the treating operation, and items are cut to desired lengths in the woods. Dierks Forests, Inc. owns 1.8 million acres of forest land in Arkansas and Oklahoma. (See "Intensive Forest Management", THE TIMBERMAN, November 1956.) Stock is delivered to the plant by truck or railroad gondola cars. A Pettibone swivel clam Cary-Lift and four Gerlinger lift trucks handle material at the plant.

Two hundred thousand poles are debarked and treated annually. They range in length from 16 to 110 feet, and may be as much as 28 inches in diameter at the butt or as small as 3½ inches at the top. Some of the long poles are bought from other owners. Pole debarking is done with two Nelson pole peelers, equipped with cutter heads, which remove the projecting knots as well as the bark.

In handling posts, the continuous-feed Cambio machine can take stock through as fast as 125 lineal feet per minute. Both the feed rolls and the debarking tools are mounted on cantilever supports, which permit automatic adjustment to various diameter pieces from one to 14 inches through. Rolls have their pressure adjusted by means of a hydraulic system, and are driven by electric gearhead motors. Pressure on the five debarking tools is maintained by rubber bands. Incoming posts strike the tools at an angle, and the latter quickly make the necessary adjustment. Proper tolerance is maintained by building up tips of the tools, which can be adjusted for different species or densities of wood.

PRESERVATIVE TREATMENT

Three preservative treatments are used:

- **Creosote.**
- **Pentachlorophenol.**
- **A mixture of half creosote and half petroleum distillate.**

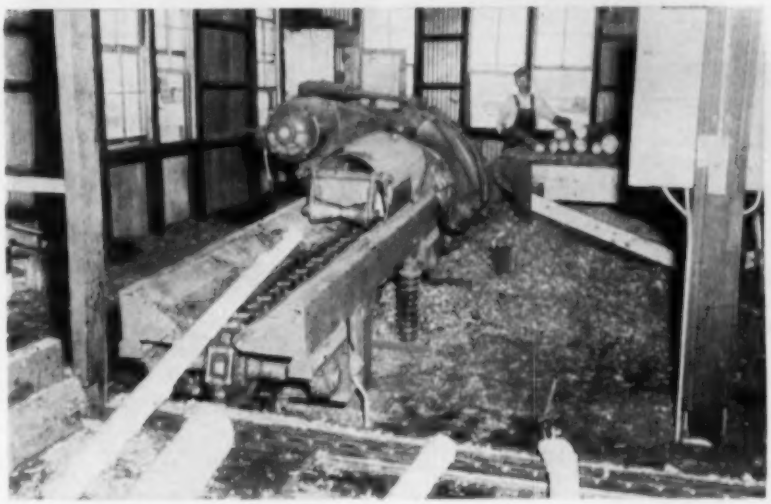
The latter is used primarily for cross ties for the company railroad and for treating a large volume of posts. Mr. Murray Neely, who is in charge of the entire operation, reports that the mixture serves as well as creosote and is more economical. This cost advantage is passed on to the customer.

Initially, the conveyor arrangement limited the debarking with this machine to pieces of 16 feet or shorter. It is expected that a rearrangement will permit the debarking of pieces up to 25 feet long. The new machine may replace the drum debarkers. Jim Loche is foreman of the debarking plant.

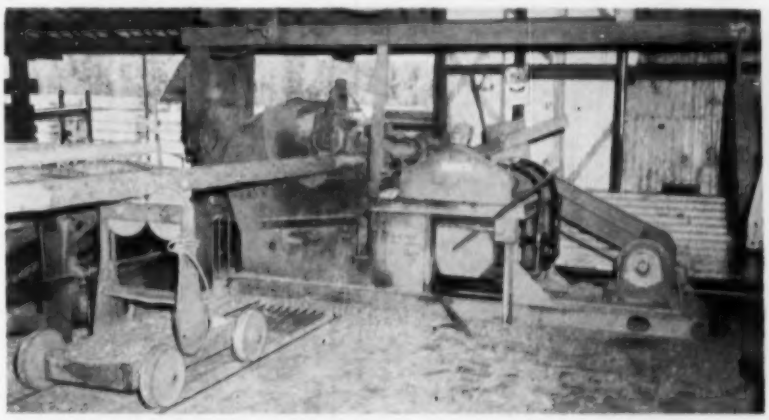
Posts emerge from the debarking plant on a sorting chain, where several men pull the posts onto racks according to length, size and quality. A rack load may contain well over 150 posts. These units are banded by two Acme ¾-inch steel straps before they are removed from the racks by lift trucks. Each unit has the number of posts marked on it for inventory purposes. Posts are given an anti-stain treatment.

Bark is used for fuel for the production of steam for the treating operation. The five 8x110-foot treating cylinders make this one of the largest treating plants in the world. Besides the 4 to 4½ million posts and 200,000 poles, the plant treats 1½ to 2 million board feet of lumber and timbers.

Machines Bark Posts and Poles for Treating Operation



CLEAN POSTS are discharged from Cambio debarker onto sorting chain. Debarker takes stock from 1 to 14-in. diameter. Posts vary from 2 to 10" through. Soderhamn unit made in Sweden.



POLES OF southern pine are debarked by either of two Nelson pole peelers. They have cutter heads which remove both projecting knots and bark. Plant produces 200,000 poles per year.

Cargo Shipment Holds Record

• Largest cargo of lumber ever to leave a British Columbia port sailed recently from Vancouver on the 15,000 ton freighter Kavodora. Between 8,500,000 and 9,000,000 board feet of lumber was carried on the ship to the Atlantic seaboard market. The vessel was under charter to Seaboard Lumber Sales, which held the previous record of an 8,000,000 foot cargo established about a year ago. About a dozen sawmills contributed to the Kavodora's cargo, which Seaboard officials pointed out was not indicative of any increase in business. "It simply happened that we were able to charter a large carrier that wanted to get to the East coast," said a company executive.

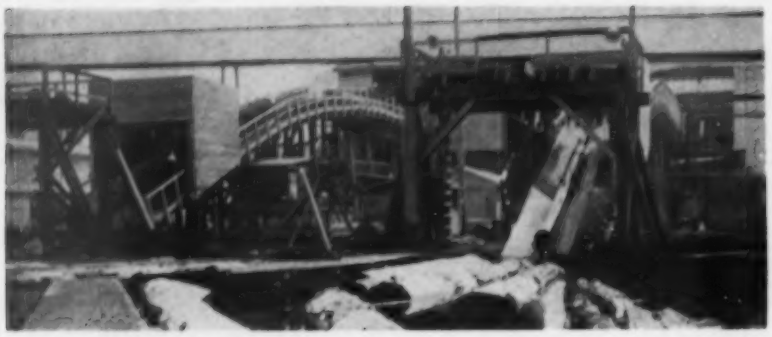
Wood Furniture Industry Course Scheduled

The sixth annual course, "Trouble Shooting in the Wood-Furniture Industry", will be held at the University of Michigan, Ann Arbor, Aug. 5-10. Offered by the Department of Wood Technology and the Summer Session and Extension Service, the course is designed to help the industry save money by minimizing costly rejects or reworking of parts.

The course emphasizes analyses of actual production and service rejects to determine cause of problems and preventive measures. Through lecture, demonstration, and laboratory practice, wood structure and properties, drying, gluing, machining, and finishing, as they relate to mis-manufactured and unserviceable parts, are covered. Sessions are informal with adequate time devoted to exchange of information and discussion of problems of immediate concern to class members.

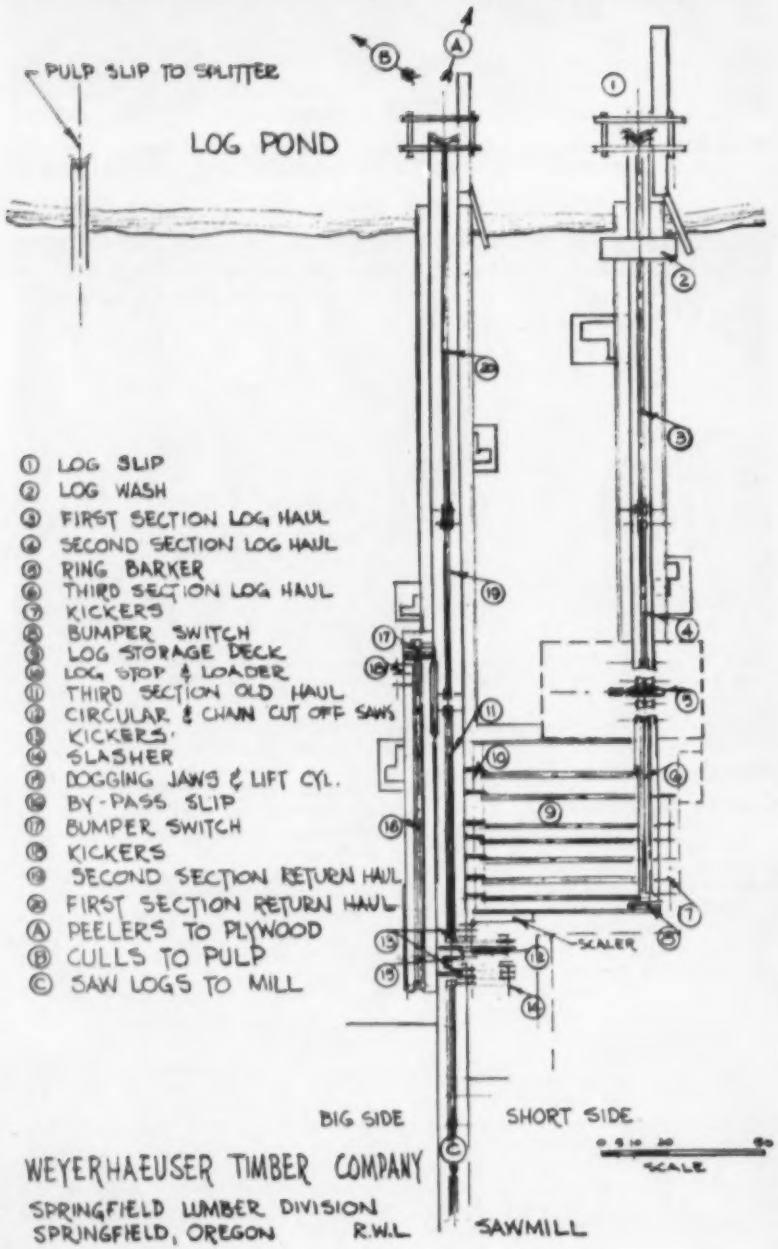
Total enrollment is limited to 18 persons with applications accepted in order received. Advanced registration is necessary and may be made with the Institutes Department, Extension Service, University of Michigan, Ann Arbor. Fee is $125.00 per person.

• The Southern Pine Association reports a new way to save space when building on small city lots. The idea is to locate all rooms as close to the boundaries as possible with each room facing a small central patio or garden. The use of Southern Pine ceiling beams and roof decking opens up the plan and renders this type of home practical.



LOG SLIP (left) brings logs up to hydraulic ring barker where they are barked and then go across transfer deck to deck saws. Peeler logs are returned to pond down chain conveyor at right. Log wash on left slip.

Distributing Deck Handles Logs



A MAJOR CHANGE-OVER in log haul arrangement which has resulted in better utilization of logs was completed last year at the Springfield, Ore. branch of the Weyerhaeuser Timber Company. The construction job at the head end of the sawmill involved a complete modification of the physical set-up surrounding the Hansel hydraulic ring barker. The new installation (see accompanying diagram) provides for more economical barking of logs, and for routing of each log or portion of log to the department where it will be processed for its best end use.

The log is taken from the pond by an endless bull chain on an elevated slip. Each log is debarked as it passes through the ring barker. It then passes onto a log deck offset from the barker at right angles, to permit storage of barked logs.

At the far end of the deck, logs are scaled and graded by the deck man who determines what is the best end-use for each log or portion of log. The deck man can now cut a peeler block, a pulp block, and a section of saw timber from one log.

If a peeler block or a pulp chunk is cut from the log, a mechanical kicker pushes that section into a by-pass slip that will return it to the pond. Here it will be floated either to the slip going to the splitter for pulp, or to the log well for peelers at the head end of the plywood mill.

PRIOR TO THE NEW arrangement, logs were routed to either the sawmill, plywood mill or pulp mill from the pond. With the direct line into the sawmill and no return slip, a log

How New Log Haul Arrangement Pays Off

- **The new arrangement has resulted in less machinery in use throughout the plant, particularly in the plywood mill.**
- **A mechanical barker, a pond saw, and a monorail system have all been put out of service. Also, a drum barker used to bark pulp logs and chunks has seen but limited service since the new arrangement.**
- **A big reduction in maintenance costs in the plywood mill has resulted.**

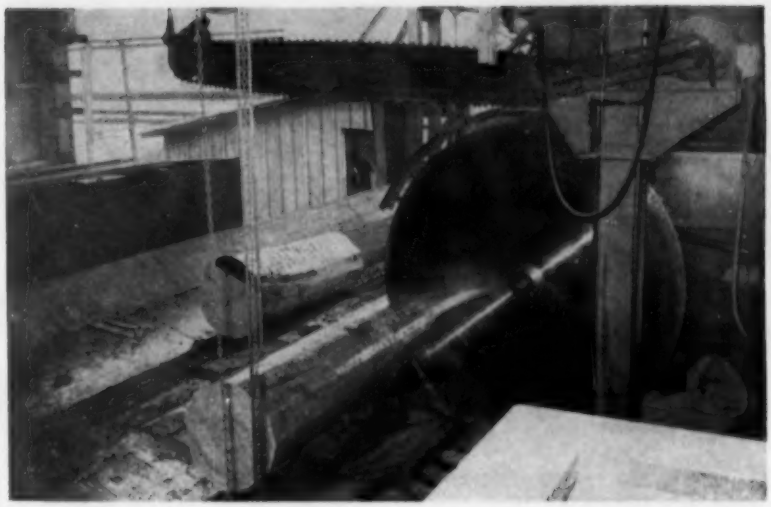
that entered the mill with a peeler block in it was all cut into lumber.

With the log deck for barked log storage, a steady flow of logs into the sawmill is assured. A more efficient job of barking is done now because more time can be taken per log. Cleaner logs mean ease of grading for the deck man, cleaner chips for the pulp mill, and a cleaner, safer operation.

In the plywood mill, more peeler blocks now can be sent to that department for processing and there is greater flexibility as far as types of logs being utilized.

In the pulp mill three distinct advantages have resulted:

- Pulp logs are now sorted in barked form, allowing for a cleaner pond.
- Loss of wood due to the drum barker operation is no longer a problem.
- Cleaner chips make a higher grade of paper which is important on a highly competitive market.



CIRCULAR AND CHAIN deck saws. Chain saw is used for largest logs. Circular saw is bucking peeler block off log. Peeler block on far side of saw is returning down log slip to pond.

Cold Press Doubles Batches

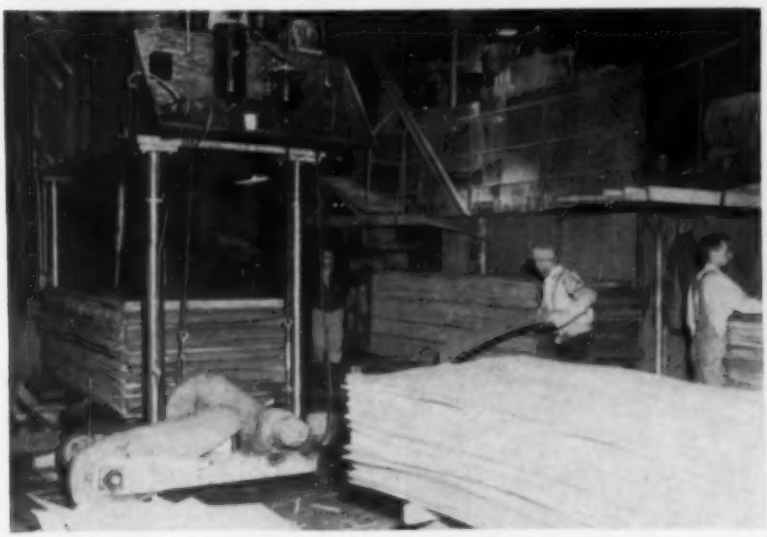
• A cold press that can handle two laid up stacks of veneer simultaneously, has been devised by Centralia Plywood, Inc., Centralia, Wash. Taking the output of two spreaders, considerable ingenuity was called upon to convert the Gunderson cold press for the double pressing job.

The press is actually a two-in-one machine. The top batch is pressed by lifting pressure through use of a torque converter unit activating a screw. The unit is a Flexodyne coupling on an electric motor. The bottom batch is pushed upward hydraulically in the conventional manner. Time of press run is 12 minutes.

The size of each stack going into the press has no effect on pressing efficiency. They may or may not be of equal number of panels. One spreader may be operating a fast layup and the other slow. One may have 60 panels while the other stack may have 100 panels. However, the two batches will go into the press and receive equal pressure.

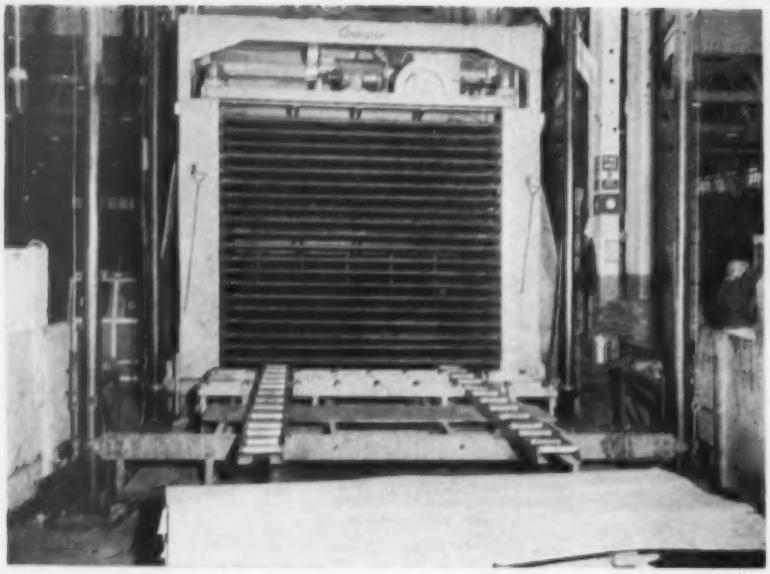
It was necessary to develop a T-shaped arrangement of conveyor rolls to carry the veneer, from the two spreaders to the press. Coming together from either side, the stacks enter the press on a common roll case. The first load is lifted against the top of the press by cable lifts on each edge of a caul board and pressure is maintained by the torque converter. The second section of the load is moved into the press and the upward pressure of the hydraulic ram firms it against the top load. This method gives equal pressure throughout the entire double stack. Globe and Francis spreaders are used for layup.

A pumping unit was rigged at the top of the press to salvage hydraulic oil. Overflow from the cylinders runs into a reservoir, is then pumped back up, filtered and reused.



TWO-IN-ONE cold press at Centralia Plywood, Inc. presses two batches at one time. Top batch is pressed by lifting pressure through use of a torque converter unit activating a screw. The bottom unit is pushed upward hydraulically in the conventional manner.

LOADS in the press can vary, 60 panels in one load, 100 in the other. Both receive equal pressure. Globe and Francis glue spreaders serve the unit.



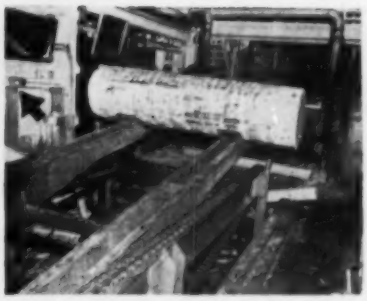
ONE OF TWO Fjellman 20-place hot presses which has American automatic loader and unloader.

Dual Production Line Featured

NEW PLANT "B" built by MacMillan & Bloedel, Ltd., Vancouver, B. C. embodies some of the latest equipment developed for the manufacture of plywood. Housed in a building with overall dimensions of 150 by 900 feet, the new plant was erected adjacent to the original plant. Budgeted on a basis of 1.75 million square feet per day on a 1/16-inch basis, performance has actually outrun this figure by 10%. Chief factor in this efficiency is smooth flow of the dual production line.

The lathe charging apparatus, made in company shops, has independent arms which extend horizontally from floor level to height of the lathe. Two fixed spotlights focus on either end of the log in the exact places where the chunks will go. Once the operator has adjusted the log so the light beams are focused on the centers, the whole unit advances to the lathe. A mirror on the wall opposite the operator enables him to center the far end of the log. The lathe is powered by a 150-hp G. E. motor, and turns the logs down to an eight-inch core.

NEW BAMFORD - PREMIER lathe is 110", turns down to 8" core. Power is 150-hp. G. E. motor. Logs are centered while still on lifting and charging arms. Light beam focuses where center of log should be. Mirror at opposite end of log permits operator to adjust both ends.



CHARGING ARMS about to place barked log in new Bamford - Premier lathe. Logs are centered at this point. Spotlight is focused on either end of log (arrow indicates bulb) where chucks will go. Independent arms adjust to this position. Then whole charging apparatus advances. Unit is company-built.

Coming off the lathe, veneer is stored on six trays 160 feet long, leading to two 110-inch Victor veneer clippers. Each clipper handles material from three of the six trays. The dual production line begins here. From here on each piece of major equipment has been installed in duplicate, except the Globe glue spreading machines, of which there are four. Each Moore dryer has elevator feed tables with air-operated scissors jacks on the tables.

Laid-up plies are fed to one of two Fjellman 20-place hot presses, equipped with American automatic loaders and unloaders. Being synchronized with the pressing itself, the automatic loaders and unloaders greatly facilitate movement of material at a point which forms a bottle neck at most manually loaded and unloaded presses. Red signal lights on the presses show a few seconds before the press drops.

While the plant produces mostly "Sylvaply" waterproof-glue sheathing 5/16-inch and ⅜-inch, many unusual jobs are also done. For instance, long panels are scarfed. Some ¾-inch material has been produced in panels 45 feet long. Entire production is 100% exterior grade.

E. V. Prentice Buys Estacada Ore., Plant

E. V. Prentice Machinery Co., Portland, Ore., is the successful bidder to purchase the plant and equipment of the Mt. Hood Hardboard and Plywood Corp. at Estacada.

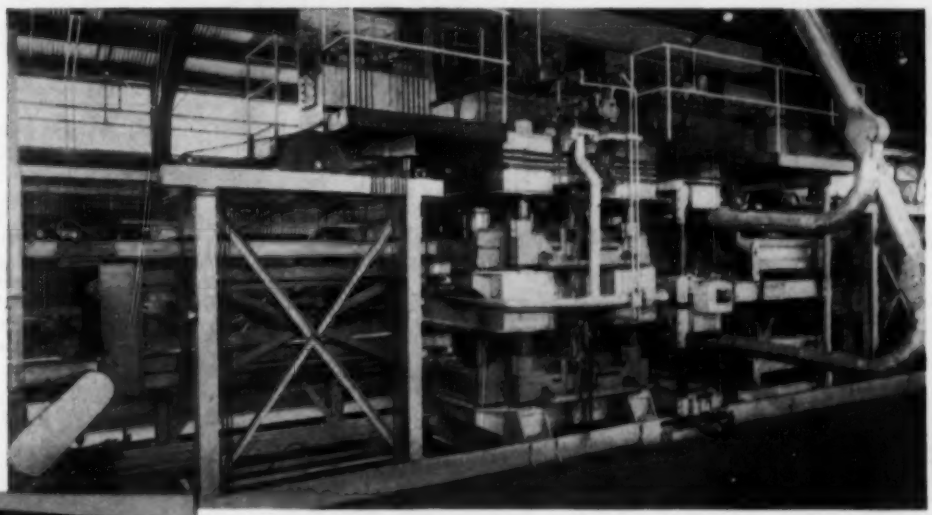
The firm, which held a judgment of about $118,000 for the plant, was the only bidder at $100,000. Prentice company spokesman said reopening plans are still indefinite.

AUTOMATION

IN HARDBOARD PRODUCTION

With VICKERS HYDRAULICS

REDUCES COSTS • IMPROVES UNIFORMITY • PROVIDES FLEXIBILITY



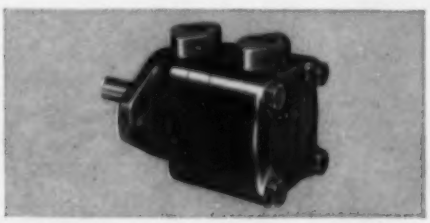
Prepress area of automatic hardboard plant designed and built as a package unit by the Industrial Development Company, Tacoma, Washington for Columbia Hardboard Company, Inc.

Reported to be the most highly automated in the wood products industry, this plant produces 60,000 sq ft of "Cedawood" per day (½" basis).

Seven Vickers Custom-Built Hydraulic Power Units play an important part in this performance; four are shown (in the photograph above) mounted on the platform directly above the prepress. The other three operate a series of automatic transfer systems in various parts of the plant. The transfer drives also use Vickers Vane Type Hydraulic Motors, which provide easily controlled variable speed for synchronizing various operations and for overload protection.

The use of hydraulic variable speed drives makes it easy to vary production rate, flakeboard thickness (⅛" to 1"), and type of product. Additional features are: accurate control, simplicity of installation, and low maintenance. For further information about the many benefits you get from Vickers Hydraulics, ask for Bulletin 55-67.

This Vickers Custom-Built Power Unit is individually designed to meet specific needs. It assures dependable performance, improves and simplifies design, reduces installation time and cost, and makes servicing easier. Write for Bulletin 52-45.



The performance-proven Vickers Balanced Vane Type Hydraulic Motor is an economical, efficient, and compact means of providing variable speed rotary power. It can be used for reversing service and can be stalled under load without damage. Write for Bulletin I&M-5103.

7834

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IN CANADA: Vickers-Sperry of Canada, Ltd., Toronto and Montreal

IN ONE OPERATION center is cut out of a piece of core eliminating two large knot holes.

Peeler-Mizer Triples Savings

Seven saw core trimmer cuts veneer widths from eight to twenty inches.

TRIPLE SAVINGS are being realized at Textron's plywood plant in Coquille, Ore. by a seven saw core trimmer, trade-named the Ellis Peeler Mizer, which has been installed in the core assembly at the end of the dry chain. Seven of the saws are controlled; one is stationary.

The trimmer salvages a large percentage of what would otherwise be reject core stock. Designed to cut parallel edges simultaneously it makes possible a speedy operation there at the trimmer. Elimination of a large proportion of the usual amount of wedge shaped pieces saves time at the glue machine.

Following the suggestion of Textron for such a machine the Coos Bay Fabricating company, headed by James Ellis, designed and built one. It replaces one of earlier design in which a sliding guide directed irregular pieces past a single stationary saw. When both edges had to be trimmed a piece would be turned and sent through again, involving a time delay and edges weren't always parallel.

The machine as built for Textron is not only proving successful there, but it is evoking considerable interest among other West Coast plywood operators. Consequently the Coos Bay Fabricating company has patented it and is in the process of manufacturing more.

THE UNIT IS DESIGNED for use in connection with either the dry or the green chains, or for use separately to cut strips as for plugs. With a wider bed it can replace a dry clipper with the advantage of cutting both edges simultaneously.

In the unit as installed at Coquille Plywood a stationary saw is at the left. Seven controlled saws, staggered in two series, make it possible to cut any desired width from 8″ to 20″. Or the saws may be used in combination to cut several widths at once, as for plug stock.

The table is 8′ long by 41″ wide with arms on the right extending the width by 10″. Thirty five inches high, it is supported and braced by I beams. Three pairs of 4″ steel rollers carry the stock past the saws. The 6″ hollow ground saws are staggered in two series because it is mechanically impracticable to set them close enough in one series to make the desired 2″ variation in widths of cut.

These seven saws are mounted on arms connecting them with two powered shafts whose fittings are standard except for arbors which had to be made in order to fit in the desired space.

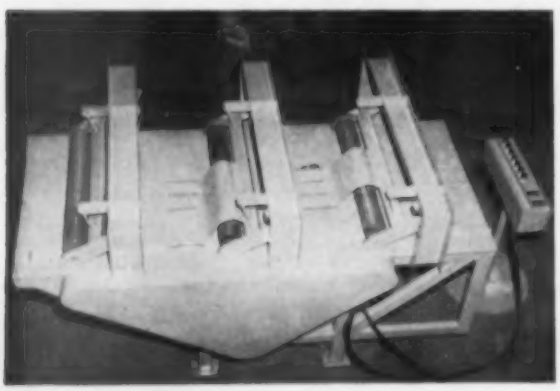
EACH IS OPERATED independently and governed by a time-delay switch that can be adjusted to hold the saw in cutting position from instantaneous to five minutes. They fall back automatically at the end of the time interval.

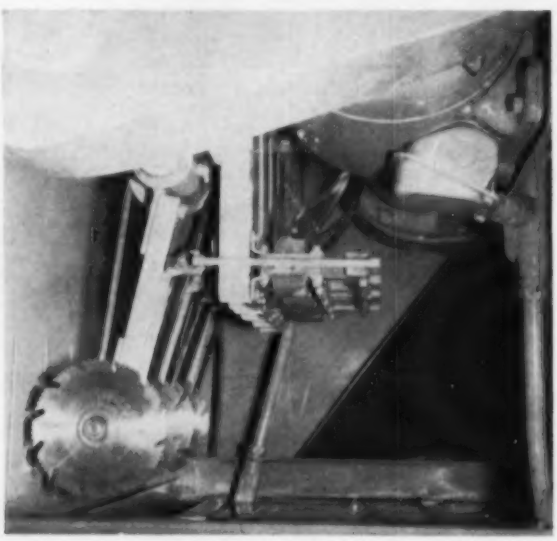
The 2 hp, 3-phase, 440 volt motor powers the saws at 5000 rpm via a V-belt power take off from the main shafts.

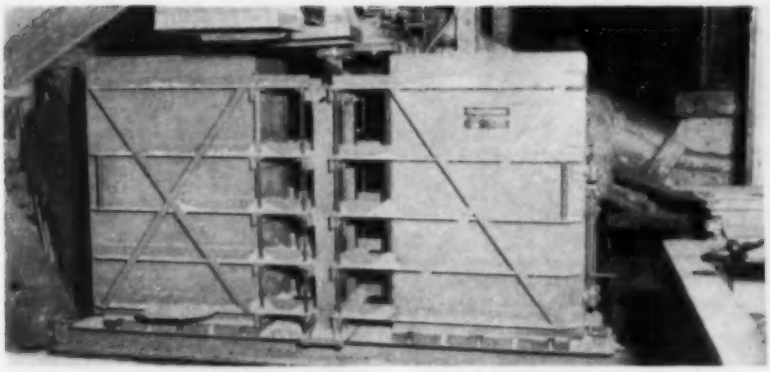
Rollers are machined down from standard four inch steel pipe, the bottom ones being regular gauge, the top ones extra heavy. They are powered

(*Continued on page* 57)

PHOTO AT RIGHT shows a detailed view of the battery of four saws with solenoids. Bottom picture is top view of the Ellis-Peeler-Mizer showing arrangements of saws and the moveable control panel.



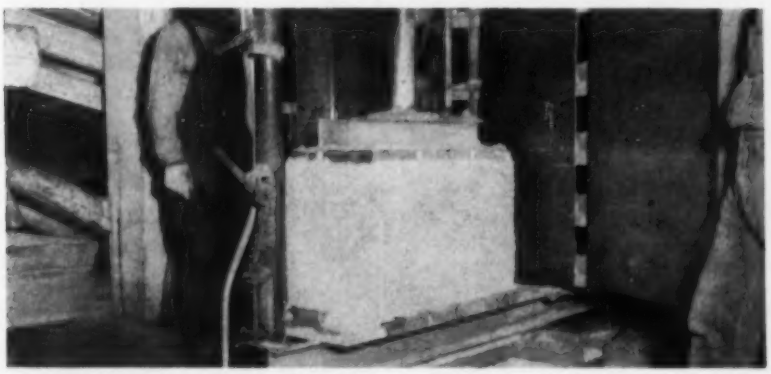




PLANER shavings baler revolves, while half is being filled and the other half being pressed. Made by Consolidated Baling Machine Co., this double baler is efficient.

Baler Presses Planer Shavings

• Sawdust and other wastes are burned in the boilers at the Pankratz Lumber Co., Seattle, Wash. But, planer shavings presented a problem in disposal because they burn too hot. Ordinary boiler grates do not stand up under this kind of combustion. In this mill, which cuts 30,000 to 35,000 feet per day and planes most of it, a considerable volume of planer shavings accumulate. Several solutions were tried, e.g., a modified hay-baler.



BIDES OF BALER may be opened while under compression for placing of slats. Above, shows completed bale of shavings ready for strapping. Bales weigh 95 to 100 pounds.

The installation of a special baler seems to have solved the problem. The baler, a number 710, was made by the Consolidated Baling Machine Co., Brooklyn, N. Y. This is a double baler, pivoted in the center. By revolving, one end can be filled from an overhead hopper while the other end is being pressed. A 7½-hp pump for oil pressure in the hydraulic press develops 1500-psi. With the pressure applied, the press may be completely opened up. This makes easy access for wiring the bales. Two wool slats are used, top and bottom, on each bale. Three strands of baling wire are used on each bale and are threaded through the top and bottom of the press. When the binding is finished, pressure is released, the completed bale is removed. The whole process takes only a few minutes time.

There is a ready market for the baled planer shaving throughout most of the year. During the winter months the supply cannot keep up with the demand. Shavings are used for bedding, litter on poultry farms, mulch, and on the floors of butcher shops. Most of the retailing is done by feed stores and co-operatives. As might be expected, the demand is somewhat less during summer months, so some storage of bales becomes necessary, at least on a temporary basis.

The Pankratz Mill is the kind of place one might expect to find such progressive innovations. This marks the 96th year for the company, operating now under the third generation of the family. John S. Pankratz, president and general manager, has been in the business 40 years. The first Pankratz mill was founded in 1860 at Manitowoc, Wis. There are now four mills in the organization: the Seattle mill; Standard Lumber & Manufacturing Co., Carlsborg, Wash.; Standard Shingle Co., Port Angeles, Wash.; and Standard Shingle Co., Anacortes, Wash. Their combined production per year is: Lumber, 30 million feet; logging, 30 million feet; and shingles, two cars per day.

Congress Reviews Pattern Of Foreign Trade

A broad scale review of problems and policies affecting world trade was started in late June by the Senate Interstate and Foreign Commerce Committee, chairmanned by Senator Warren G. Magnuson of Washington. The hearings are expected to include trade to Western and Eastern Europe, Central and South America, South Africa and broader trade opportunities for American business in the Far East, particularly Red China.

The inquiry will also take up questions of existing trade bans, the advisability of embargoes, travel restrictions, the amount of trade with each world trade subdivision, and the impact it has between those countries and the United States.

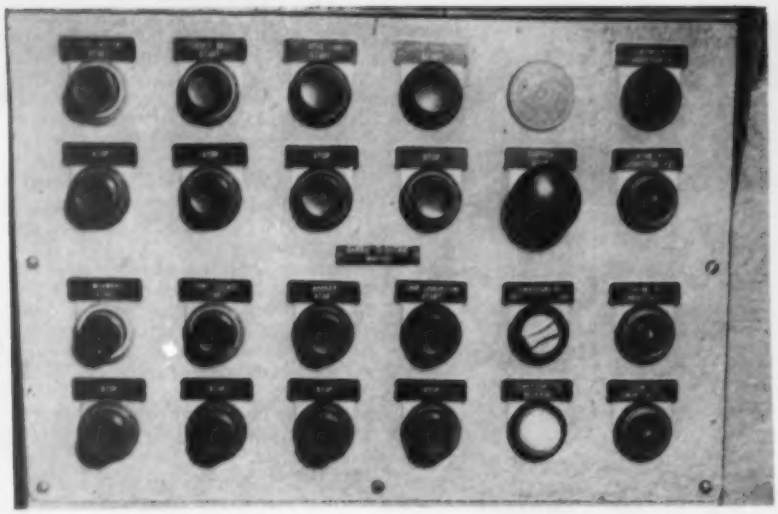
Interest is running especially high over that phase of the inquiry dealing with Far East trade policies. This issue has come into Congressional focus for the first time in years because of the recent decision by Britain and other European countries to discard the U. S.-supported embargo, and enlarge their trade with Red China.

President Eisenhower has admitted to a personal belief that the time has arrived for a reappraisal of the China embargo. The President also indicated that the perpetuation of the total embargo would undoubtedly lead to clandestine trade with the Orient.

Southern Senators are expected to play a leading role in urging a change in our China policy. They are especially concerned with seeing a shift in Japanese textiles, which have become a strong competitor in our domestic market, to the China area. They are also interested in boosting sales for U. S. raw cotton in the Oriental market.

Indications now support the conclusion that the China issue is being reviewed at the highest level. No early action on a change can be forecast, but for the first time since the end of the Korean conflict, sentiment in Congress and within the Administration, is growing for the "realistic policy" called for by industrialists.

One factor that may hasten a decision is a step-up in demands by West Coast businessmen for an opportunity to compete with British and European businessmen for the China market which, in the past, represented an important share of shipping from the West Coast in flour and lumber.



CENTRAL CONTROLS are key to chip handling at the Seattle plywood plant of U. S. Plywood. The top board gives one operator control of all conveyors to the chipper and chipper itself. The smaller board is for the Rader pneumatic system and also is controlled by the same operator.

SUMNER 72" vertical chipper is housed separately to reduce noise. Only the storage bin, shaker screens are inside the plant.

Controls Improve Chip Handling

CHIP PRODUCTION is becoming an integral part of plywood production. While it has increased the overall utilization of the basic raw material, the handling and actual production of chips have presented many problems to the operators. One solution to handling is seen at the Seattle plant of the United States Plywood Corp. which has a new Sumner chipper and a central control panel that gives one person positive control of the scrap veneer from the time it leaves the green chain until the chips are loaded on the barge for shipment.

Located just outside of the chipper room, and at the junction of the conveyors which bring the scrap material from the entire plant, this panel concentrates all of the controls for most of the conveyors, the chipper, and the blower system at one point. Operation of other conveyors, over which the operator has no control, is indicated to him with a set of lights that are mounted on the right hand side of the panel. Such a system prevents a jam-up at the chipper and insures a constant chip supply with a minimum of effort.

The veneer chipper is a new 72-inch vertical cut Sumner with a bottom discharge. When the chips are discharged from the chipper, they are carried up on another conveyor and dumped into an oversized hopper on the shaker. The chips are screened for size and sent to the barge by means of a Rader Pneumatic conveying system located under the mill floor. Oversized chips are sent to the fuel house. To increase plant safety and reduce some of the noise inherent in the chipping process, the chipper is separated from the plant by a partition.

For practical purposes, the control panel can be divided into three parts. One, the conveyor controls. Should there be a concentration of material coming from one lathe, the operator can send some of the material to the fuel hog. This can be done for either of the green chains. The second set of controls is for the chipper, chipper feed, chip conveyor and the shaker. All portions of the actual chipping are controlled from this central station. The remaining buttons are for the pneumatic conveyor. In addition to these controls, a pressure gauge has been mounted on the wall directly behind the operator so that he may see at all times the operating pressure of the air conveyor.

Nesting Chair Introduced

• After three years of experimenting, the Raylen "Nesting" chair is being manufactured by the Raylen Manufacturing Co., Denver, Colorado. Designed and named for its ability to stack or "nest" with over 100% more space saving convenience, the "Nester" retains desired features generally sacrificed by other chairs of this type.

Two styles are available . . . with or without armrests, either style, mixed or separate, stack 25 high on a "dolly" and will easily clear the standard 6′ 8″ doorway.

This chair will actually "nest" safely to ceiling heights. When storage space is limited, over 200 Raylen Nesting Chairs need only 504 cubic feet.

Business Aids Published

Eleven "Management Aids for Small Business" have been combined into a single permanent volume, "Management Aids for Small Business"—Annual Number 3, published by The Small Business Administration.

Some of the Aids reproduced in the volume are: "How Good Records Aid Income Tax Reporting", "Wage Incentives in Small Business", "Streamlining Office Systems in Small Business", and "How Marketing Research Helps Small Business".

The Annual can be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C., 45 cents a copy.

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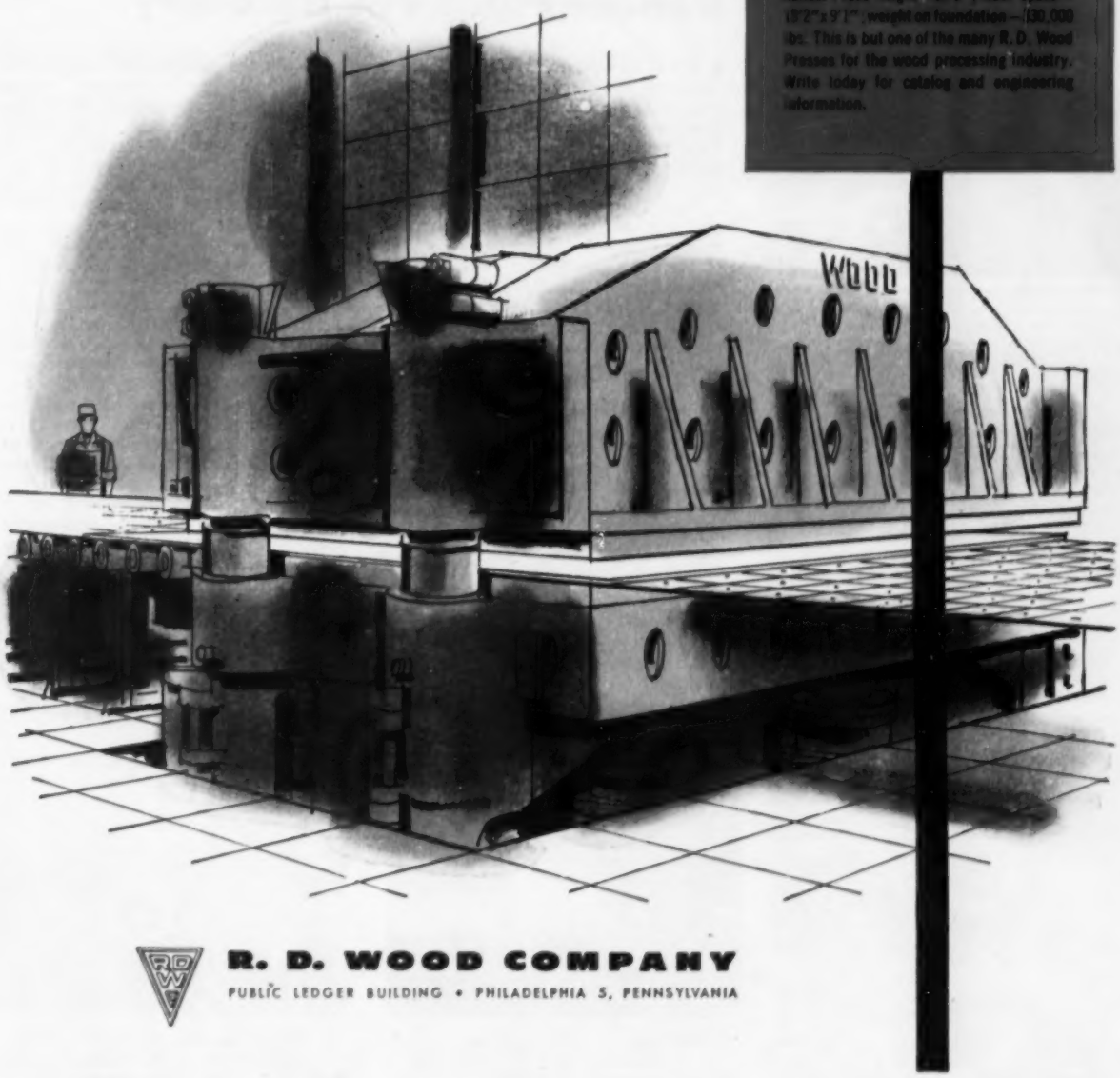
Working with numerous basic models, R. D. Wood engineers incorporate your specifications and modifications to produce the press exactly suited to your needs. You can be sure of its quality, too. For every Wood Press is constructed of selected materials by master craftsmen. This is your warranty of dependable performance and precise operation. Why not consult us when planning your next hydraulic press?

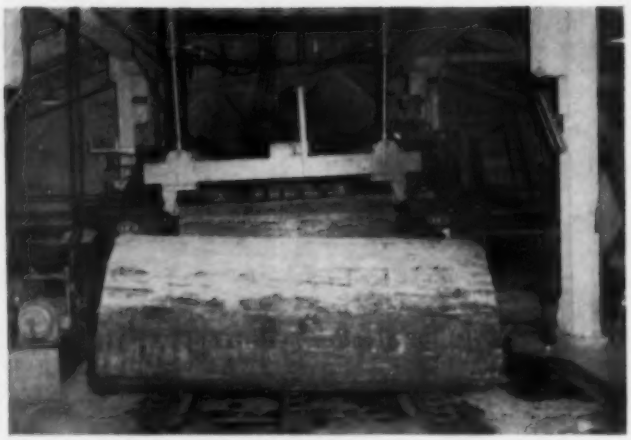
1200 ton R. D. Wood Hydraulic Press for the manufacture of composition board. Platen size—13'10" x 9'1"; operating daylight—3", open to 24" for inspection and maintenance. Press height—14'0"; floor space—15'2"x 9'1"; weight on foundation—730,000 lbs. This is but one of the many R. D. Wood Presses for the wood processing industry. Write today for catalog and engineering information.



R. D. WOOD COMPANY

PUBLIC LEDGER BUILDING • PHILADELPHIA 5, PENNSYLVANIA

LOG LIFT, with Moline Malleable conveyor chain, lifts logs to Ederer barker at new veneer plant of Hult Lumber Co.



EDERER CHARGER charges 84 x 113 - inch lathe. The 60 feet of chain ahead of the lathe allows room for deck storage.

Veneer Plant Ups Recovery

• TO GAIN MAXIMUM DOLLAR recovery for every log, Hult Lumber Co., Junction City, Ore., has added a green veneer plant to its Horton, Ore., band mill operation. The new veneer plant cuts 50,000 feet, log scale, per day.

The new plant, which started operations in mid-September, has Coe and Ederer equipment. Logs come up a log lift, after being bucked by the L-M pond saw, to be fed to the Ederer barker. From the barker, blocks are kicked either back into the pond or may continue on through to the log deck by chain conveyor. Sixty feet of chain ahead of the lathe allows room for some deck storage.

From the log deck, an Ederer overhead hydraulic charger picks up the logs for charging the 113x84-inch Coe lathe. A General Electric spotlight is used to pre-center the logs for the charger and lathe.

The lathe area is particularly well lighted to allow the lathe operator maximum vision in peeling the blocks. Overhead mercury vapor floodlights are augumented with two spotlights to flood both ends of the block.

A Reliance drive is used on the lathe and tray. Six trays comprise the 150-foot Coe tray system serving two Coe semi-automatic clippers. Veneer flows from the clippers to the sorting chain where it is pulled to Kimwood carts. The veneer is strapped with Signode ½-inch steel strapping and loaded onto trailers by Hyster lift trucks. The Clark Trucking Co. trucks veneer to the company's various customers. The use of three trailers allows speeding of the hauling operations.

At the present time cores are being sold for fuel wood. However, a skrag mill is under construction. A chain conveyor is being built to convey cores from the lathe directly to the skrag.

Moline conveyors are used throughout the plant. The longest conveyor is 500 feet and runs the full length of the plant from the lathe and barker to the burner.

The new 410-foot building is of wood construction with galvanized steel roofing. A fire extinguisher system installed by the Rushlight Automatic Sprinkler Co., has a million gallon reservoir on a nearby hill to provide water at 110-psi.

Robert Van Orden is Horton branch manager and Jack Lydstrom is veneer plant foreman.

SPOTLIGHTS on each end of lathe allow operator to see log more clearly. Vapor lights on ceiling also increase visibility.

SORTING CHAIN has two Coe semi-automatic clippers in background. Sorting chain has six trays, is approximately 150 feet long.

KIMWOOD CARTS take veneer from sorting chain. Cull material drops to transfer chain at end of table, goes to burner.

VENEER STACKS are strapped with Signode ½-inch steel strapping. They are moved to trailers by Hyster lift trucks.

TRAILMOBILE TRAILER with load of veneer is inspected by Robert Van Orden, manager of the Hult Lumber Company plant.

FLOORING IS strapped into palletized units with Signode strapping for shipment to users. An innovation in flooring industry, these pallets of flooring cut the builder's handling and construction costs.

NEW END-matching machine (Yates-American) assures quality and uniformity in tongue and groove operations. Machine tongue and grooves ends of oak flooring. Worker on left checks flooring for proper line-up.

Hardwood Flooring Plant Employs New Features

Olin Mathieson Chemical Corporation palletizes all flooring shipments.

A NEW $1,000,000 HARDWOOD flooring plant was opened in December by the Frost Forest Products Division of Olin Mathieson Chemical Corporation at Shreveport, Louisiana. One of the most efficient in the United States, it can turn out more than 25,000,000 board feet of flooring a year.

The new flooring plant replaces one destroyed by fire on March 10, 1956. It covers 30 acres of the 137 acres Olin Mathieson obtained late in 1955 when it purchased the Shreveport Creosoting Company. Since this purchase, the treating plant has also been enlarged and modernized.

Demand for hardwood flooring is predicated generally on activity in the home building market and more specifically on trends in interior home design. A. Richardson, Manager, hardwood flooring sales, said he expected more than 1,000,000 housing starts by the home building industry in 1957 and predicted a growing home construction market for at least the next decade.

The new flooring plant, using mass production techniques, was built to handle demands in tomorrow's market, Mr. Richardson said. "If surveys are indicative of a trend, the wood-flooring producer with mass production facilities and quality control will grow stronger in tomorrow's market," he added.

AT THIS TIME there are about 190 flooring producers in the United States. In 1955 this industry produced 1,220,204,000 board feet of flooring.

The new flooring plant contains such features as vibration conveyors, automatic stacking and unstacking machines, the latest in fan circulating dry kilns and a complete straight-line flow from input of raw materials to output of finished flooring.

The straight-line flow assures, virtually by itself, a system of maximum quality control. New machinery accomplishes such features on Frostbrand flooring as eased edges, nailing grooves, and steel strapped bundles for palletized shipment.

Shipping flooring in palletized units will be a standard feature, offering Frost customers an easier and more economical method of handling and stacking that can be passed on to the home builders.

THE PLANT ASSURES uniform quality, quick service, realistic delivery schedules, direct sales, and a new point: the ability to buy Frostbrand flooring and Frost Golden Pine construction lumber in mixed carloads.

Frost will keep large inventories of flooring at the plant and also at their sawmills located in Huttig, Arkansas, and Winnfield, Louisiana, to assure prompt delivery.

An important construction feature of the new plant is the 70-foot span pre-cut roof trusses made of Southern pine lumber pressure treated with minalith fire-retardant chemicals.

Minalith chemicals offer maximum protection against fire. When fire strikes minalith-treated wood, it causes the chemicals to melt and form a protective covering around the wood, keeping oxygen away and thereby preventing flames. Minalith is also clean, odorless, paintable, nontoxic and non-corrosive. The Southern pine used in these trusses was manufactured by Olin Mathieson sawmills at Huttig, Arkansas, and Winnfield, Louisiana, and pressure treated with minalith chemicals at Olin Mathieson's Bell Street treating plant.

Peeler-Mizer

(*Continued from page 52*)

by a ½ hp, 3-phase, 440 volt gear head motor to run stock through at 176′ per minute, but can be adjusted for other speeds.

Sleeves over the first two rollers and extending along above the table just past the edge of the saws help keep the veneer flat for accurate cutting.

The motor assembly at the right hand side of the table is housed behind a protective triangular steel apron.

The left hand main switch of the operating panel is for the rollers, the other for the saws. The small switches are for each of the seven individually operated saws.

In the set up at Coquille the core flows off the dry belt through a core saw. As it is graded rejects are thrown on one of a pair of right angled belts that carry it past the trimmer. From there an elevated belt carries it back onto the core sorting table for final grading.

A gauge in front of the operator is numbered to correspond to the numbered switches on the control panel for the seven saws.

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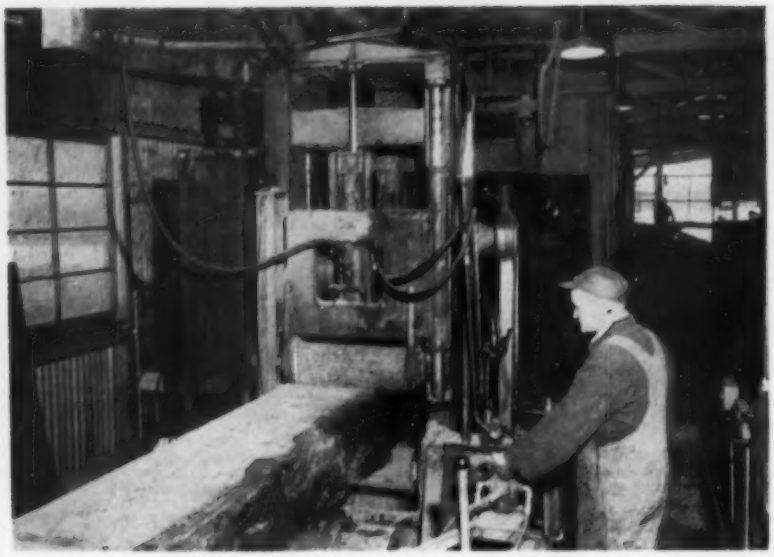


CONVERTING CANT into dimension lbr. with 28" Jeddeloh gang which replaces former headrig.

Cant Gang Replaces Log Gang

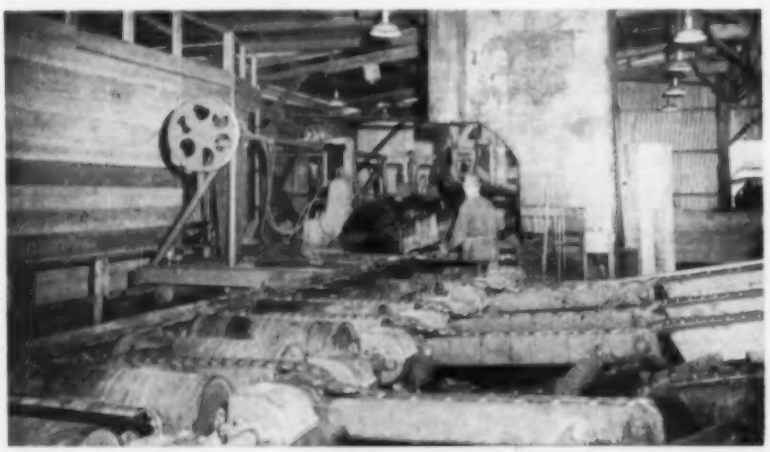
SUBSEQUENT TO CONVERTING from a circular to gang headrig early in 1955, S. H. & W. Lumber Co. has again modified its Grants Pass, Ore. sawmill to meet changing industrial factors. So extensive was the recent conversion it practically resulted in a new mill. In addition to major changes made in the plant's processing components and lay-out, the daily cut increased from 50M to around 80M.

The log gang was removed and an entire section added to the front end of the mill. A Monarch 7 ft. band headrig, working in conjunction with a Prow (Machine Works, Grants Pass) riderless carriage and Prow electric-driven feedworks, was installed in this new section. A 28 in. Jeddeloh "Sweed" cant gang replaced the former log gang.

As pointed out by Pres. O. L. Hogan, the present plant facilities provide a wide range of processing potentials, thus rather effectively providing adaptive means for coping with continuously changing conditions. This applies to variations in markets and to the sort of logs available.

Installation of a 54 in. Yates-American resaw had already been undertaken when THE LUMBERMAN visited the plant recently. Its completion was expected to elevate the plant's daily output to the 100-120-M range.

The company operates a planer in conjunction with the sawmill.



MONARCH 7' band headrig and Prow Machine Wks riderless carriage in new section of plant.

Utilization Survey Made

A program for expansion of Oregon forest industries through development of wood residue utilization, holding promise for creation of an estimated 3100 new jobs and an additional $15,000,000 payroll for the state, was released by the Oregon development commission in June.

The study based on research and recommendations of Sandwell & Co., consulting engineers, blue-prints a plan for conversion of wood residues into payrolls and jobs. It also follows through with specific courses of action.

Basing its recommendation on the finding that "the potential growth in forest industries lies in conversion of mill residue and, to a lesser extent, logging residue and small trees, into wood pulp and, less important, wood pulp and, less important, wood composition boards," the Sandwell firm sites 12 specific areas in Oregon suitable for the development of these two industries.

Sandwell engineers estimated the potential raw material supply in the foreseeable future for expansion of wood residue utilizing industries in Oregon is approximately 900,000 bone-dry tons per year of wood chips.

This corresponds to 450,000 air-dry tons of chemical fibre for paper making. This present rate of production, the report indicates, will continue or expand.

If this potential were fully utilized, it would represent a 60 per cent increase in present utilization of wood residue.

The survey found three areas of the state particularly suited to new wood composition board industries rather than the pulp and paper field.

It picked nine other sites which have basic factors "conductive to establishment of pulp and paper industries."

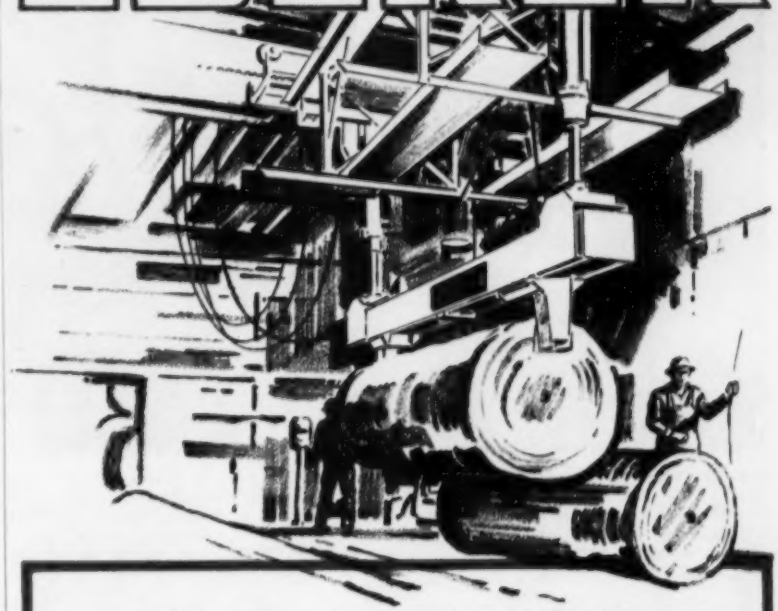
Other highlights of the document include:

- While requirements for the establishment of new producers of kraft paper boards, bleached kraft pulp and wood composition boards can generally be met in the state, factors of effluent disposal, water supply and site suitability might limit action in a few locations and should be the subject of intensive study by new enterprises.

- Favoring development are availability of good transportation, proximity to source of good residue, water supply, power supply and ease of by-product disposal.

- Forests of Oregon are not expected to support any major permanent expansion of sawtimber milling in the foreseeable future, although it is believed that the present rate of saw-timber cutting can be maintained indefinitely.

EDERER



Lathe down time for chucking —no more than 10 seconds!

The EDERER OVERHEAD LATHE CHARGER is "job-engineered" to pick up a peeler — precenter it to lathe chucks — and move it forward to exact chucking position. In a five-hour clocked operation, average chucking time was only 18 seconds after peeler knife was retracted! In this same five-hour period, the charger handled 75 102-inch long peelers of average 36-inch diameter.

Equally efficient is the floor-mounted lathe charger, designed for use where overhead clearance is restricted.

Both overhead and floor-mounted chargers are hydraulically operated from one set of controls, located for the operator's convenience. With the two models to choose from, you can have a charger to fit your exact requirements. Either charger can be supplied in a simpler adaptation to load your barker too.

Write for EDERER Lathe Charger Bulletin V-106.

EDERER "job-engineering" helps expand production in an expanding industry.

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EXPORT DIVISION:
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EDERER
PLYWOOD EQUIPMENT

SINCE 1901 "JOB-ENGINEERING" CRANES AND HEAVY EQUIPMENT

OFFICERS FOR 1957 view plywood beam display. Front row, from l.: trustee Kenneth Ford, Roseburg Lbr. Co.; president A. W. Agnew, Pacific Coast Co.; trustee Enar Erickson, Peninsula Plywood Corp.; secretary W. C. Ulett, Coquille Plywood, Inc.; managing director W. E. Difford. Back row, from left: trustee E. D. Egge, West Coast Plywood Co.; trustee Fred L. Johnson, Columbia Veneer Co.; treasurer Arnold Koutonen, St. Paul and Tacoma Lumber Co.

Plywood Leaders Review Promotion Plans for 1957

Douglas Fir Plywood Association presents new ideas for merchandising

"GET AWAY FROM producing 4x8 foot plywood panels and turn your thinking to fabrication," advised W. E. Difford, managing director, Douglas Fir Plywood Association, in his state-of-the-union message to members attending the group's 21st annual session at Gearhart, Ore., on June 10 and 11.

Driving home his point with specific examples of end-use products (see accompanying photos), Mr. Difford also outlined plans for an aggressive merchandising and promotion program. This would keep plywood uses at least abreast of an installed present capacity of 6.4 billion square feet annually from the group's 113 member mills. Current production is running at an annual rate of 5½ billion square feet; sales are nine per cent ahead of 1956.

"Even if we brought plywood consumption per house up to 3000 square feet (it's now at 1300 square feet), we couldn't begin to use up the output of our fast-growing industry. We must develop new markets not yet realized," warned Mr. Difford. He mentioned sanded panels as requiring new market outlets and cited the as-yet-untapped markets in industrial processing.

He outlined training plans for enlisting 300 mill salesmen and 4000 jobber-distributors in a promotional effort to sell plywood as a superior building product. This would result in 120,000 man-day calls. Advertising promotion must be backed up with personal contacts, said Mr. Difford.

He urged members:

- To make as many finished products as possible in their own plants.
- Cut more material to size to help merchandise Handi-Panel racks.
- Maintain quality production, with particular emphasis on bigger and more numerous grade mark stamps.

New Officers

President: A. W. AGNEW, *Pacific Coast Co., Sonoma, Calif.*

Vice-president: C. HENRY BACON, JR., *Simpson Logging Co., Shelton, Wash.*

Secretary: WILLIAM C. ULETT, *Coquille Plywood, Inc., Coquille, Ore.*

Treasurer: ARNOLD KOUTONEN, *St. Paul & Tacoma Lumber Co., Olympia, Wash.*

New DFPA Trustees: FRED L. JOHNSON, *Columbia Veneer Co., Seattle;* E. D. EGGE, *West Coast Plywood Co., Aberdeen, Wash.;* KENNETH FORD, *Roseburg Lumber Co., Roseburg, Ore.;* ENAR ERICKSON, *Peninsula Plywood Corp., Port Angeles, Wash.*

NEW OFFICERS (at left) inspect folded plate roof structure display. From left: president A. W. Agnew, treasurer Arnold Koutonen, secretary William C. Ulett. Not in photo, vice president C. Henry Bacon, Jr. Bottom photo shows domical roof system design—four arched plywood skins supported at four corners.

More Promotion Needed

Newly elected president A. W. Agnew, Pacific Coast Co., Sonoma, Calif., singled out the plywood industry as being way behind in percentage of gross sale dollars allocated to sales promotion.

Competing building materials are spending from four to five times as much for promotional work. For media advertising other materials exceed plywood's expenditures by from eight to 12 times. One board manufacturer alone spends more than the entire plywood industry.

The Economic Look Ahead

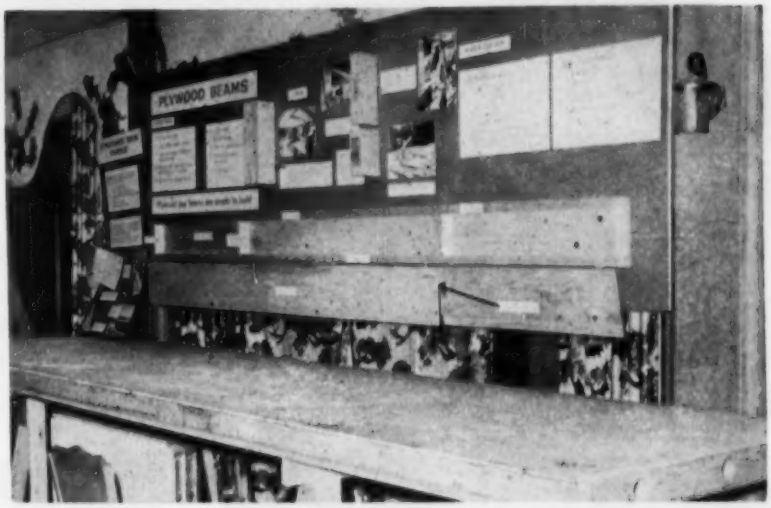
A tightened national economy for another 9 to 12 months and a continuation of plywood demand for this year and next at about current levels was predicted by Dr. Charles F. Roos, Econometric Institute, Inc., New York.

Other highlights of Dr. Roos' forecast:

- Nationally, consumer goods productive capacity has been expanded four per cent but output is about half of one per cent less than last year.
- Demand for machinery and equipment will continue slightly downward for the next 9 to 12 months.
- No real upturn in general business conditions until about the second quarter of 1958. Tight money policy has disturbed normal trade relations.
- Commercial and residential building volume down for 1957, but increase in public building has brought general level up to about 1956 level.

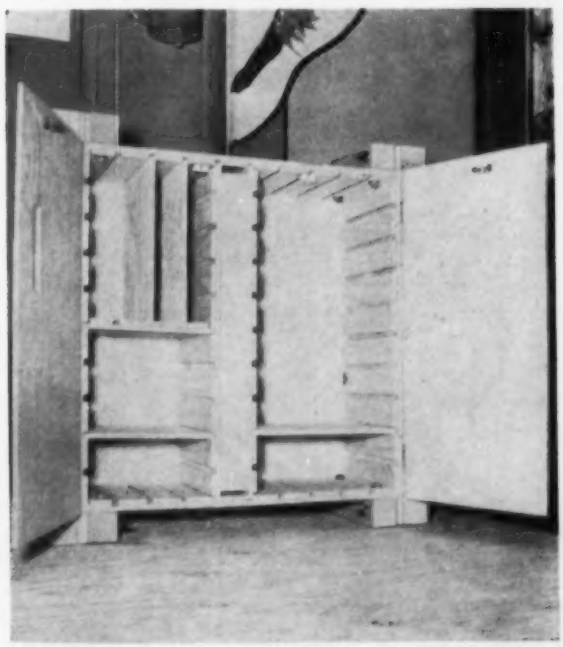
(*Continued on page* 77)

New Ideas in Plywood Uses Help Sell Product

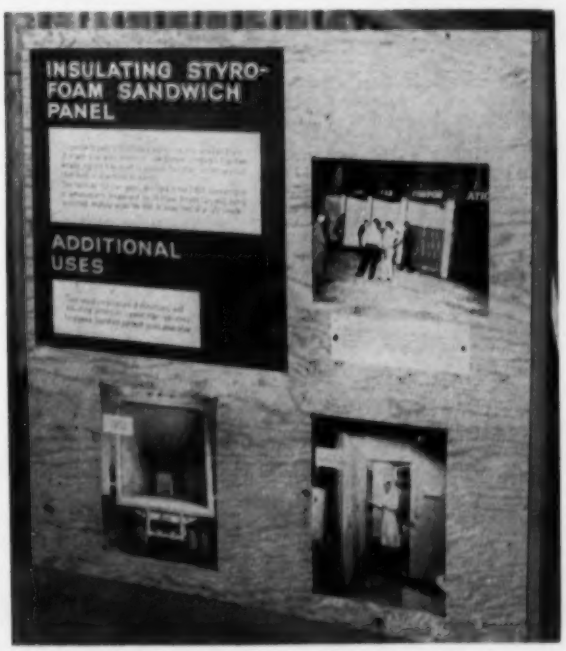


Plywood beams and stressed skin panels offer building utility

Stressed skin panel vault has two panels with honeycomb core



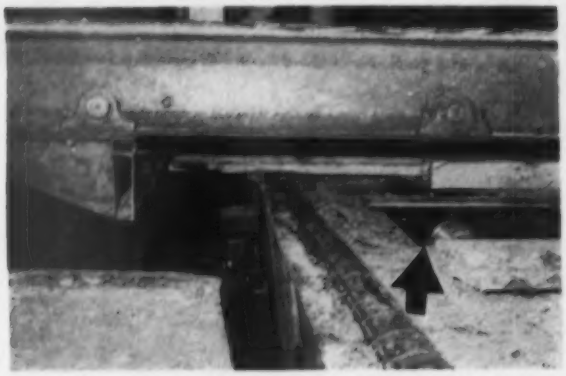
HERE IS cabinet offering many industrial uses. Partitions can be arranged in numerous ways to accommodate most commodities.



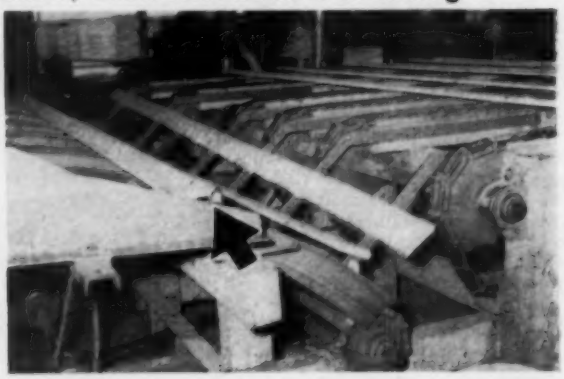
INSULATING STYROFOAM sandwich panel. Two plywood skins with foamed polystyrene core provide high strength, good insulation.

Job Saving Ideas

How Ozan Lumber Co. at Prescott, Arkansas, Short-Cuts Lumber Handling

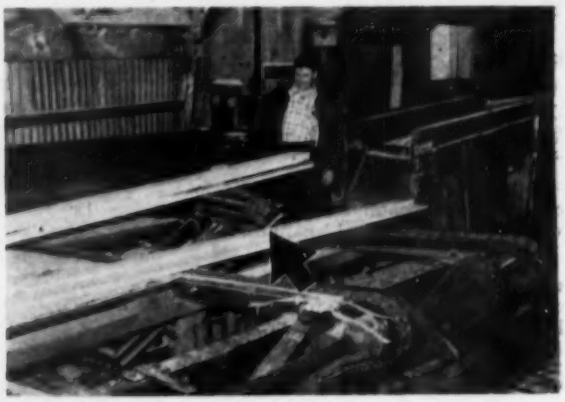


SPECIAL 36" roll case (*arrow*) on transfer table from horizontal resaw to trimmer is "lop-sided" or eccentric, picks up board, feeds it against bumper plate (left) to line up stock for trimmer.



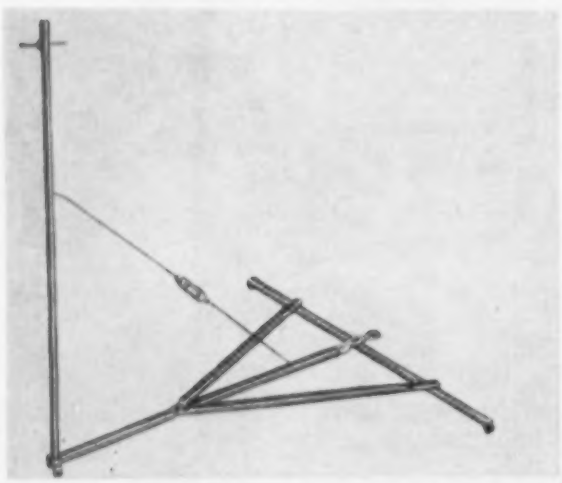
LUG DEVICE (*arrow*) straightens out stock on various chain feeds to end trimmers, etc. Boards drop into saddle and are picked up one at a time by the lugged chain at each side.

ON ROLLCASE leading from the headrig to edger and resaws, air operated lift-up arms raise slab from rolls, allow it to be held back while clear cant clears the rolls for feeding to edger. The slab can then be fed to the horizontal resaw. This device is operated by the offbearer with floor button control.



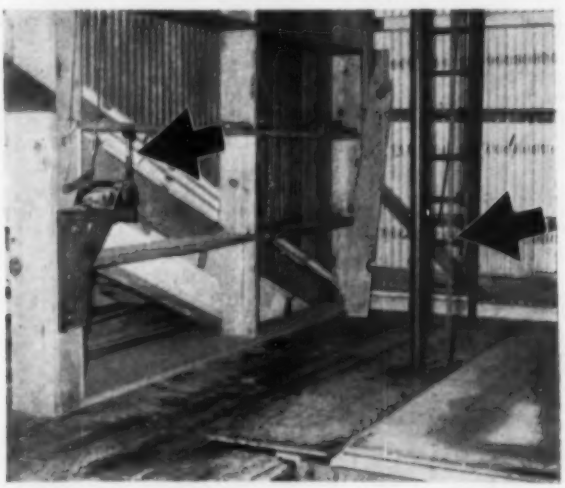
JUMP ROLL behind vertical resaw is located in transfer which takes lumber to trimmer. All cants go through vertical resaw twice. This roll returns two inch boards back to infeed table of the resaw so they can be cut into one inch boards. Similar jump roll is on the mill's horizontal resaw for refeed for second cut.

Track and Saw Lining Gauge



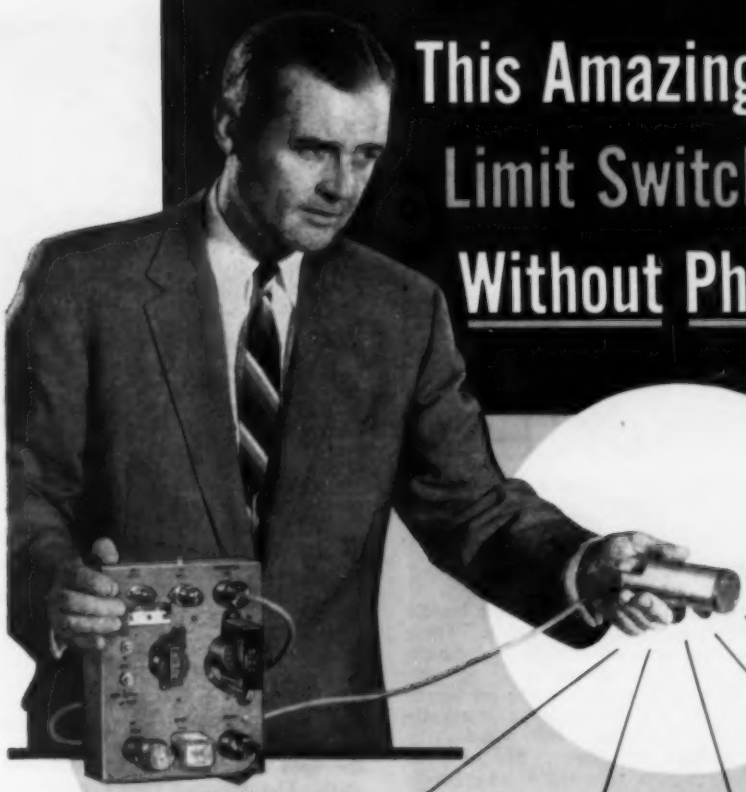
PORTABLE ALUMINUM saw and track guage developed by Jack L. Prewett, Long Creek, Ore. Photo shows unit mounted and ready to line saw with track. Device travels from saw to any distance that filer wants, to see how much lead he's carrying in mill. Wheels are divided, self-adjusting to any "V" rail by spring tension.

Electric Motor Raises Headrig Saw



IN SAW FILING loft of Southcoast Lbr. Co., Brookings, Oregon lever (*left arrow*), moving from left to right, is linked by cable to switch on overhead reversible electric motor. Motor has chain drive on sprocket (*right arrow*), which lifts or lowers the bandsaw from the headrig. An iron pipe guides the saw movement.

This Amazing New Limit Switch Operates Without Physical Contact!



Transducer (sensing head) is actuated by presence of magnetic materials over a wide range of sizes, shapes, weights, roughness, speeds

No moving parts. No metal-to-metal contact required for operation

Sensitivity up to 1 inch

Can be mounted in any position. Not affected by vibration

Small size (1⅞" x 6") Fits into tight spots

Non-magnetic material between the part and transducer does not affect operation

• Here's an entirely new concept in industrial limit switches! We've named it the **PROXIMITY LIMIT SWITCH** because it is actuated by the nearness of ferrous parts or materials. Since its operation requires no physical contact, it has unlimited applications in places where the use of conventional limit switches is either impractical or impossible! Its range of application is broadened, too, because the transducer (sensing head) is not affected by vibration or by the presence of non-magnetic material.

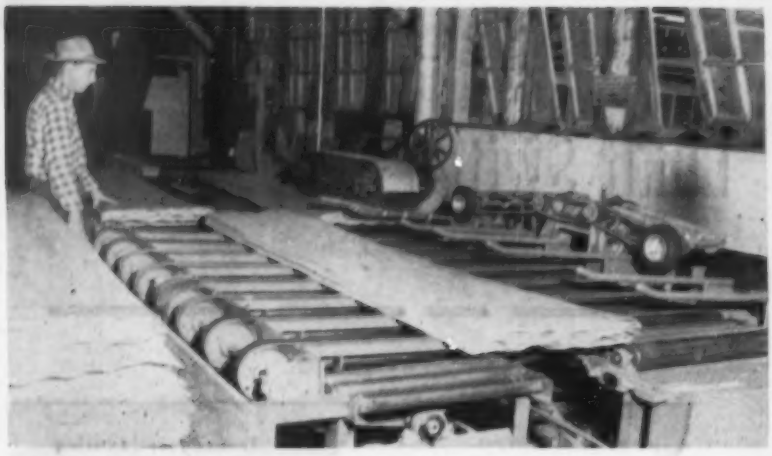
In paint spray systems, on production line presses, multiple process machines, heavy automation equipment—there are literally scores of places where this amazing new PROXIMITY SWITCH will do the job better!

ASK YOUR SQUARE D FIELD ENGINEER FOR A DEMONSTRATION. OR WRITE FOR PROXIMITY LIMIT SWITCH BULLETIN. ADDRESS SQUARE D COMPANY, 4332 VALLEY BLVD., LOS ANGELES 32, CALIF.

***NOW...EC&M* PRODUCTS ARE A PART OF THE SQUARE D LINE!**

SQUARE D COMPANY

Plywood Department



VENEER JOINTER system at Buffelen Woodworking Co. also includes a shaker, jointer feeder, merry-go-round and turn table, all company made. Jointer is a Sheboygan unit.

Equipment Placement Cuts Jointer Man-Hours

Operation of the veneer jointer at Buffelen Woodworking Co., Tacoma, Wash., has been simplified and the man-hours required lessened as the result of an elaborate arrangement of home-made equipment surrounding the jointer.

The equipment was completely designed and fabricated by the maintenance department of Buffelen. It includes a shaker, jointer feeder, merry-go-round and turn table. The jointer is a Sheboygan.

At the beginning of the operation, the veneer sheets are piled on conveyor rolls. When the desired number of sheets have been stacked up, a floor button activates five belts running at right angles to the roll case. These belts carry the bundle into the horizontal arms of the shaker. These are automatically raised to a vertical position. The six pairs of parallel arms hold the bundle loosely, the bundle resting on T-shaped supports. These supports work up and down alternately, settling the sheets.

Having been shaken the set length of time, the bundle is automatically lowered to conveyor rolls which carry it through the jointer. Rubber-tired pressure rolls hold the bundle firmly going into the jointer.

Next step in the merry-go-round is the turn table. This table automatically raises the bundle above the conveyor rolls, reverses it, and sends it back to the operator on the original roll case. If this is the first time around, the operator repeats the process, the opposite side of the bundle now being smoothed. If it is the second time around, the veneer is piled on carts and sent to the edge gluing department. The process originally took three men; one does the work now.

Splitter Prepares Damaged Cores for Chipper

A company-designed core splitter enables Vancouver Plywood Co., Springfield, Ore., to chip large damaged cores to feed its recently purchased Sumner chipper. The splitter consists of an I-beam framework with a piece of clipper knife as the splitting device. A 72x6-inch cylinder, operating with air pressure on oil, drives the knife through the piece lengthwise. In particularly large pieces, successive splits can be made until each piece is under the 14-inch maximum chipper diameter.

CORE SPLITTER handles damaged cores over 14 inches, prepares them for chipper.

Split pieces are removed by chain conveyor, then lifted on four flight chains to the chute feeding the chipper. Chips are fed into the same chip loading system that services the veneer chipper.

The two chippers produce 25 cars of chips monthly for shipment to Longview Fibre Co., Longview. Good cores are sold to a nearby stud mill.

CENTER MARKING device finds exact center of core, reduces round-up waste.

Accurate Core Marking

Greater recovery from core lathe blocks through minimizing round-up is secured at the International Paper Co., Long-Bell division plywood plant at Vaughn, Ore., with a center-marker which quickly locates the core's geometric center. Two pieces of angle-iron are welded at right angles to one another with a strip of steel welded at the apex and bisecting the 90-degree angle. The deckman places the angle-iron against the surface of the block and draws a pencil line along the strip's straight-edge. He turns the device halfway around the block and draws another line to intersect the first. The intersection gives block's center for accurate pre-centering in the Ederer charger for Coe core lathe.

"Earmuffs" Keep Out Noise

Earmuff-type ear protection is employed by the United States Plywood Corp., Associated division at Eugene, Ore., against the irritating noise of the high frequency whine of machines. The 3-man crew operating the Greenlee tenoner producing Texture One-Eleven is equipped with the protectors, manufactured by Straightaway Sound Products, David Clark Co., Worcester, Mass. The earmuffs make lower pitches audible, allowing for conversation.

EARMUFFS protect tenoner operators from irritating whining sound, talking can

DFPA Opens New Testing Lab

• Douglas Fir Plywood Association has opened a new testing laboratory in Arcata, California, which will service the expanding plywood industry in northern California and southern Oregon.

The new laboratory was officially opened May 28th with an open house held for 50 top plywood executives and production men in the area. On hand for the occasion were Nelson S. Perkins, DFPA technical director, and assistant, John Hess.

The new laboratory is headed by L. C. Walton. Wayne Ross, laboratory technician, will assist Walton.

The Arcata unit brings to three the number of testing centers maintained by the association which represents more than 85 per cent of total west coast plywood production.

The Arcata laboratory will serve as a backstop for roving quality supervisors who subject member mills' production lines to constant surveillance under the joint industry-wide quality control program administered for the manufacturers by the association. The laboratory contains the latest in plywood testing equipment.

Under the industry's quality control program, a mill's production is checked through an elaborate procedure. This involves a corps of 22 trained inspectors, all with plywood mill experience, operating under a chief, with each inspector assigned to four or five mills. The inspectors are responsible for checking all phases of plywood production, with special emphasis on the assembly times, pressing times and a score of other important items which may affect plywood quality.

NEW DFPA Testing Laboratory located in Arcata, Calif., which will provide backstop for quality supervisors who subject member mills' production lines to constant surveillance under joint industry-wide quality control program administered for manufacturers by association.

HEADING NEW Arcata, Calif., testing laboratory is L. C. Walton (in white shirt), holding sample of plywood used in shear test machine at left. Viewers are, from left: H. Chase, Roddiscraft, Inc.; Walton; John Hess, Asst. Technical Director, DFPA; John LaFleur, Carolina-Pacific Plywood, Inc.; Earl Sayers, Roddiscraft, Inc.; Jack Harmon, Northern Calif. Plywood.

Plywood Imports Cited

The hardwood plywood import problem, which affects builders and building supply dealers because of the material's rapidly increasing use, is headed for a showdown in Congress. Bills to set a quota on imports, backed by 22 senators and 25 representatives, are pending in both houses.

M. C. McIver, chairman of the Hardwood Plywood Manufacturers Committee which represents American interests, charges that importers are seeking to wreck the domestic industry.

McIver cited the following figures on the import situation:

Since 1951, consumption of hardwood plywood has increased 77 per cent. Imports captured all but 4.7 per cent of this increase.

In 1951, imports accounted for only 7.6 per cent of American consumption; in 1956 they accounted for 45-plus per cent.

The Department of Labor price index for hardwood plywood stands at 104, whereas the general wholesale price index for other commodities is at 124. Meanwhile domestic manufacturing costs have risen 30 to 40 per cent over 1951.

Harbor Sales Down

Harbor Plywood Corp., Aberdeen, Wash., reports a decline of $2 million in sales during 1956 and says the lag is due to the slowdown in new home construction. Martin N. Deggeller, Harbor president, reports production higher but earnings down due to the price decline. The fiscal report released by Deggeller points out that the index price of plywood decreased from $90 in May, 1956, to $67 which held until January of this year when it advanced to $72. Net sales in 1956 were $20 million, compared to $1.9 million in 1955. Net income for the fiscal year was $603,743, compared to $1.2 million a year ago.

Stimson Veneer Plant Ready to Operate

Stimson Lumber Co. was ready in late-June to start production in its new veneer plant located at the firm's Forest Grove, Ore., sawmill-hardboard installation. The veneer plant will take timber previously sent through one of two headrigs at the sawmill, will have a capacity of 90 million square feet, ⅛-inch basis, a year on a one-shift basis.

Stimson has added a second shift at its second sawmill headrig and is producing 65,000 to 70,000 feet a shift.

Equipment at the new veneer plant includes a Coe lathe, Coe clippers, Jackson chippers, and a 72-inch Nicholson barker.

More than 45 per cent of Oregon's total manufacturing payroll comes from the forest industries.

New Board Process Promises Greater Cedar Utilization

UTILIZATION OF CEDAR for the manufacture of hardboard, flooring and building board is the objective of extensive tests being carried out in British Columbia by Powell River Co., the provincial research council and several other organizations.

Harold S. Foley, chairman of the board of the Powell River Co., announces that while investigations into production of pulp from wood residues, including sawdust, have been encouraging and that they may lead to reclamation of a large volume of wood fibre previously lost to industry, the company has developed a building board in a pilot plant and a study is being made to determine the possibilities of its commercial application.

"We have large holdings of Western red cedar which include much low grade material not suitable for lumber products," said Mr. Foley. "For many years this material has given us a low return. We have, therefore, devoted considerable research to new and higher value uses. One encouraging field is in the building boards, of excellent appearance and with strength approaching that of plywood. We have also been studying production of pulp from cedar.

"The problem, of course, is partly technical and because of the low yield from cedar partly economic. Recently, however, our research indicates the possibility of overcoming these problems."

Dr. R. H. Wright, director of the B. C. Research Council, informs The LUMBERMAN that his group has been working on two projects designed to effect a more economical use of cedar leftover wood. One of them involves the heating and pressing of scraps and ends of clear cedar lumber to form a type of durable flooring. The other is a method of using inferior, defective and even rotten cedar wood and a small percentage of bark, defibrating it and converting it into semi-hardboard by a dry pressure process without using additional binder.

"Cedar possesses a natural bonding property that can be utilized either to hold massive pieces of wood together or bind small particles of wood into a solid," said Dr. Wright, who added that cost estimates for the process had been developed by the B. C. Research Council and efforts had been made, so far without success, to get forest industry companies interested in it. Canadian patents have been obtained by the Research Council for both the flooring and hardboard processes.

How Hardened Cedar Is Made

Here is a brief outline of the process and estimated production costs for producing "hardened cedar", as prepared by the British Columbia Research Council:

Cedar strips are planed on four sides to a standard dimension. They are then placed in a multi-opening hydraulic press and subjected to a pressure of about 1000 pounds per square inch and a temperature of about 320° F for several minutes. The temperature is then reduced to about 175° F, the pressure is released and the finished strips are withdrawn.

The cycle: loading - pressing - curing - cooling - unloading is about eight minutes.

Final adjustment of the thickness is effected by sanding.

What Hardened Cedar Is Like

Depending upon construction of the press, Hardened Cedar comes out as strips two or three inches wide and in random lengths up to four feet, or as eight inch square tiles.

Color is variable and ranges from a cool grey brown to a warm red brown; original grain of wood is emphasized.

Material is heavier and harder than oak as the following figures show:

	Hardened Cedar	Oak
Specific Gravity	1.2 to 1.4	0.7
Hardness (Rockwell Sc. R)	100 to 111	0 to 10

Actual small-scale wearing tests in University buildings have shown that the material is dimensionally stable and actually wears better than oak.

Laying Hardened Cedar

Hardened Cedar can be made as strips about 1/16 inch thick which can be glued at factory to inexpensive, soft-wood tongue-and-grooved flooring and thereafter laid at the site like any other tongue-and-grooved flooring; or

Hardened Cedar can be made as thick (quarter inch) tiles and face-nailed to a suitable sub-floor at the site.

It is also possible that a thin eight inch square hardened cedar tile suitable for gluing to a sub-floor at the site might be produced but this development requires further investigation to establish its feasibility.

Markets for Hardened Cedar

Hardened Cedar in strip form would have a price advantage over square-edged strip oak and would be more durable.

	Prices-cents per sq ft
Hardened Cedar strip (est.)	27c
No. 1 square-edged oak strip	37c
No. 2 square-edged oak strip	35c
Tongue-and-groove oak shorts	27c

Major problem in marketing Hardened Cedar will be public preference for oak flooring.

Hardened Cedar tiles would be priced competitively with asphalt tiles and would offer a price advantage over rubber tiles. Warmth, durability and appeal of a hardwood floor would give Hardened Cedar an advantage over synthetic tiles in most applications.

Hardened Cedar might also be used as a wall panelling where its hardness and attractive "wood" appearance would give it an advantage.

Hardboard Uses Increase

• Increasing use of hardboard by West Coast home builders, the ever-expanding industrial applications of the product and the significance of hardboard manufacture in the regional economy were discussion highlights at the joint session of Hardboard Association officials and the Construction Industries Division of the Los Angeles Chamber of Commerce, held recently in Los Angeles, Calif. Speakers were Paul B. Shoemaker, national chairman and president of Operation Home Improvement, and Donald Linville, executive secretary, Hardboard Association.

Shoemaker sounded a high note of optimism when he reported that total expenditures for home repair and improvement may reach an all-time high of $17 billion in 1957 — exceeding outlays for new home construction. He said the momentum built up by the O. H. I. program after 18 months has exceeded all expectations of the building industry and other sponsoring organizations.

Linville, as spokesman for the hardboard group, recalled the spectacular growth of the industry in the last quarter century. He said annual production of hardboard now exceeds 1½ billion square feet, although only part of the potential use of the product has been tapped. He referred his audience to displays of hardboard uses in various industries, including electronics, furniture manufacture, toys and transportation, and emphasized increasing uses of the product in new home construction and improvement.

He said the Hardboard Association has sponsored numerous home-improvement projects in Pacific Coast states, retaining topflight architects to design "practical new ways" to use hardboard in smart new-construction and remodeling projects. The projects, he said, have been and will be publicized in leading national consumer and shelter magazines, thus helping to build up a demand for builders' services in the vast "fix-up" market.

Eight of the industry's eleven manufacturing plants are situated in Western States, close to the sources of raw materials, Linville said in conclusion.

Lebanite

The Hardboard that's NEW and DIFFERENT!

Lebanite's stable, weather-resistant surface adapts it to a multitude of uses. In garage door panels, it is easily worked for a variety of handsome effects.

- Smooth, Identical Finish on BOTH Sides
- Even BLOND Color for Smart Natural Finish
- UNIFORM Texture and Appearance, Board after Board
- No Delamination — HIGH INTERNAL STRENGTH
- Hard, Neat, Damage-Resistant Edges — Saws Cleanly, No Chipping or Flaking

IDEAL FOR Plastics Lamination, Core Stock for Hardwood Veneers, Furniture Backing and Facing, Television Cabinets, Displays, Exhibits, Store Fixtures, Toy Manufacture, Baby Furniture, House Construction, Kitchen Cabinets and many more modern uses!

LEBANEX HARDBOARD OVERLAY

Plywood core surfaced on both sides by Lebanite. Combines plywood's strength with Lebanite's smooth check-resistant, paintable surface.

PERFO-SQUARE HARDBOARD

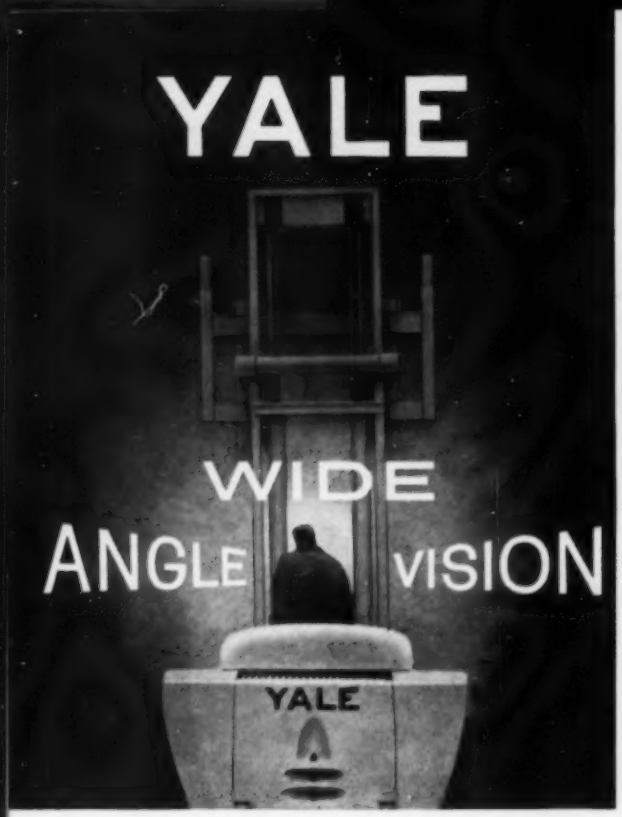
The perforated hardboard with the square holes. Combines Lebanite's many advantages with square ¼" holes which design provides the largest bearing surface for product display.

To Find Out WHY *Lebanite Is Different—Everything a Hardboard Should Be—Send for Brochure and Free Sample Today*

CASCADES PLYWOOD CORPORATION

PUBLIC SERVICE BUILDING • PORTLAND 4, OREGON

300% MORE VISIBILITY



IN NEW HIGH-CAPACITY GAS TRUCKS FOR EASY HANDLING OF LUMBER

Operator sits high and in center. Upright channels are wide-spaced, nested to reduce frontal obstruction. Right next to them—the hoisting cylinders, one right, one left. Chains that raise carriage are in front of cylinders—*out* of the arc of vision. Carriage has one top bar, one bottom bar—good visibility between them at all levels of fork lift. Result: Yale's exclusive "Wide-Angle Vision" assures safer, faster, more efficient handling of heavy loads.

GREATER STABILITY...FAST CYCLE OPERATION

New Yale High-Capacity Gas Trucks have low center of gravity, with high underclearance, and a broad lifting base afforded by two ball-mounted lift cylinders. To further increase stability factor, there is wide channel-roller spacing at all points of lift, plus side-thrust rollers on channel and carriage. Large-size, high-flotation tires give good traction. For fast cycle operation, these trucks have lifting speeds up to 60 feet per minute...fast, safe lowering...travel speeds up to 20 MPH...excellent maneuverability.

Premium Engineering Features—Included as Standard—Give Top Performance Under Toughest Conditions:

- I-beam side members in frame for extra strength.
- Channels mounted on ball-bearing rollers to reduce friction and wear.
- All controls conveniently located.
- Power steering and power brakes.
- Yale Fluid Coupling or standard transmission.
- Designed for a complete set of attachments, engineered for minimum loss distance.

CAPACITIES: 15,000 to 20,000 lbs.

YALE* *REG. U. S. PAT. OFF.

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INDUSTRIAL LIFT TRUCKS AND HOISTS

GASOLINE, ELECTRIC & LP-GAS INDUSTRIAL LIFT TRUCKS • WORKSAVERS
WAREHOUSERS • HAND TRUCKS • HAND AND ELECTRIC HOISTS

YALE MATERIALS HANDLING DIVISION, A DIVISION OF THE YALE & TOWNE MANUFACTURING CO. MANUFACTURING PLANTS: PHILADELPHIA, PA.; SAN LEANDRO, CALIF.

To meet the need of expanding industries for better materials handling methods and equipment, look to Yale for advances in research, engineering, manufacturing, sales and service—as

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Please send the new Yale High-Capacity Gas Truck brochure No. 5230.

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In Canada: write The Yale & Towne Manufacturing Co., St. Catharines, Ontario, Canada

Tall Timber

(*Continued from page 5*)

Box Factory, Temple Builders Supply, Inc., Temple Steel Products Co., Temple-Coward Investment, Goose Creek Housing Co., Temple Manufacturing Co., and Contractor's Supplies, Inc.—all of which he serves as president.

In addition he serves as officer of the following organizations: Texas Southeastern Railroad, Temple-White Co., Lumbermen's Investment Corporation of Texas, Love Wood Products of Texas.

HE IS A DIRECTOR in Southland Paper Mills, Inc., First State Bank & Trust Co. of Lufkin, Texarkana National Bank, Diboll State Bank, Pineland State Bank, Land O'Pines Dairy Products Co., and the T. L. Smith Co.

In industry work he has served as director or officer for Southern Pine Assn., National Lumber Manufacturers Assn., Texas Lumber Manufacturers Assn., National Wooden Box Assn.., Southern Box & Crate Assn., and Lumbermen's Assn. of Texas. He was president and later board chairman of Southern Pine Assn. and is presently vice president of National Wooden Box Assn.

In civic work he has served in the following capacities: Member of the State Board of Education, president of the Angelina County Chamber of Commerce, president of the Lufkin Club, trustee of Lufkin's famous Memorial Hospital, trustee of the Temple Foundation, director of St. Cyprian's Day School, trustee of St. Stephen's Episcopal School, and director of Texas Tourist Foundation.

Arthur Temple, Jr. works with the pace of a Texas quarter horse to keep up with and ahead of the various Temple interests. His reputation for quick, clear decisions has been carried over to his interest in civic and youth group activity.

NOT LONG AGO he was asked to help a committee raise funds for equipment and facilities for Little League baseball clubs of his home community. During the course of a gentle touch by Arthur, one of the county's more prosperous industries offered half of what he was asked for with the comment, "Our biggest business is the give-away business, and we will donate the rest of your request only if you insist."

Temple penned the simple reply, "If you give the balance, I will tell the kids how much you love them."

The quota was completed without further comment.

In addition to business and civic activities which would keep most men busy far beyond human capacities, Arthur Temple, Jr., finds time to spend with his family, which includes a wife and two children, and a dog whose ancestry has been questioned.

The Arthur Temples can usually be found on a summer evening in or around the pleasant pool in their back court. In the wintertime it may be gin rummy in their paneled recreation room. But one sport at the Temple household is never out of season: discussion. Any subject from business to higher education is fair game in a Temple argument. Occasionally friends and neighbors drop by for a hand of gin, a dip in the pool, or a bull session, but big parties and formal gatherings are generally avoided. Arthur has no social ambitions and usually shuns "society" gatherings.

Arthur Temple, Jr., has made his mark in the Texas lumber industry. The Temple trademark is a star in a green circle; it is regarded as a rising star in the Lone Star State.

Prentice Selected

Prentice Bloedel, who was elected first chairman of the industry advisory board of the Dominion Forest Products Laboratory, Vancouver, B. C., has resigned because of his departure from British Columbia. He has been succeeded by John G. Prentice, president of Canadian Forest Products, who had previously been vice-chairman. New vice-chairman is John Liersch, vice president, Powell River Co. The laboratory's new building at Point Grey will be ready for occupancy by the end of the year and meantime a backlog of research projects is being accumulated.

ARKANSAS OPERATORS ACCLAIM

smooth running
fast cutting

WHELAND BAND MILLS

"Smoothest running, fastest sawing we have ever operated."
—Mr. Paul M. Farrell
Farrell-Cooper Lbr. Co.
Brinkley, Arkansas

"Making several thousand feet more lumber per day...with several men less. The 7' (Wheland) Band Mill is one of the best we have ever seen."

Mr. Robert G. White
The Breece-White Mfg. Co.
Eudora, Arkansas

"I've been sawing for over 34 years and I really like this new Wheland 7' Band Mill for it will take more feed than any mill I have ever sawed on."

Mr. Henry Epps, Sawyer
Calion Lumber Co.
Calion, Arkansas

Such enthusiastic reports are not confined to Arkansas. Wheland Band Mills are setting efficiency records everywhere! More and better lumber . . . faster, with fewer men. Extra profits all around. Why not investigate advantages for your mill? Complete range of sizes available.

BULLETIN ON REQUEST

WHELAND

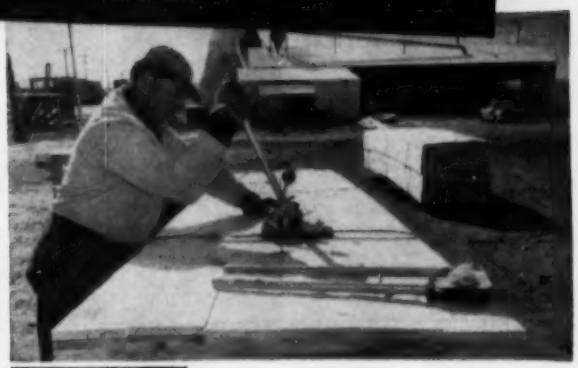
THE WHELAND COMPANY

CHATTANOOGA, TENNESSEE—PHONE AMherst 5-3181

MANUFACTURERS OF COMPLETE SAWMILLS AND AUXILIARY MACHINERY

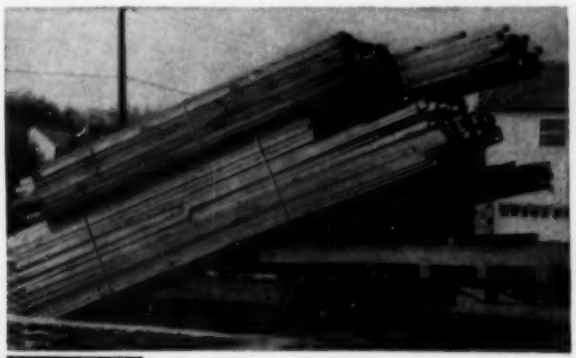
How USS GERRARD STEEL STRAPPING *Saves Money* from mill to job site

MILL—Packaged lumber really pays off, all the way down the line. It can cut handling time by 75%. And time saved is money saved. Package your lumber at the mill with USS GERRARD Steel Strapping, inventory it once, and stack it. Then it can be loaded directly from storage areas, quickly and safely. Your customers will thank you for this added money-saving service by giving you future business.



WHOLESALE—Receiving GERRARD-strapped lumber from the mill makes unloading and stacking an easy job. The stacks can be tabulated at a glance, and arranged according to grades, sizes and varieties. In loading for shipment, the same time-saving advantages are experienced again. Thus, the valuable time saved can be devoted to transporting payloads.

RETAIL—At the retail yard, tabulation of deliveries is once again a simple task. Loading, unloading, and moving bundles of lumber reinforced with GERRARD Steel Strapping is accomplished quickly and easily with a straddle truck or fork lift, and the savings in money and time is once again repeated. Different grades, sizes and varieties are stacked separately for display, and accessibility to customers.



JOB SITE—At the job site, packaged lumber can be dropped from a truck bed without the individual boards spilling in all directions—a procedure which would necessitate repiling. Moreover, packages of USS GERRARD-strapped lumber are virtually pilfer-proof—a very desirable feature at building sites where lumber shortages are prevalent.

You, too, can receive the time- and money-saving advantages that USS GERRARD has to offer. Contact a USS GERRARD sales representative, and let him show you just how GERRARD Steel Strapping will fit into your lumber-handling operation.

GERRARD STEEL STRAPPING DIVISION, UNITED STATES STEEL CORPORATION
GENERAL OFFICES: CHICAGO, ILLINOIS

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Waterborne Trade Report

By
ROBERT C. HILL

CONTINUED RECESSION, both in volume of cargo and rates, has marked the charter market during the last four weeks ending May 30. The situation is extremely soft. Observers believe that further rate declines are due. Recovery is not immediately likely as the seasonal influence of the usually quiet summer period is at hand.

There is an oversupply of freighters seeking business. Owners have been compelled to lower their sights. Cargoes have been few. From a strong sellers' market it has quickly changed to a buyers' market. The charter market has maintained its historic reputation of dropping as rapidly and as drastically as it advanced.

In the last month, rates, as a whole, have dropped at least 10 per cent. Compared with the peak levels at the end of 1956, in some instances freights have been halved. In other cases they have registered drastic drops of 25 to 40 per cent.

While rates are still much higher than three years ago, operating expenses have increased so rapidly that many operators find it difficult to make expenses and extended layup of ships may result. The hue and cry for additional tonnage from the reserve fleet of the United States merchant marine has subsided. Since the drop in rates, requests for sixty additional idle carriers have been withdrawn. Government officials are now convinced that the trade routes are overtonnaged and no further releases from the reserve fleet are likely. Chartering for the movement of scrap, both from the North Pacific and from the Gulf and North Atlantic to Japan, has eased off.

Charterers who are committed on forward business at high rates are making the best of the current situation, many of them sub-letting vessels and otherwise reducing their losses as much as possible.

Compilation of trans-Pacific charters for the month of May show an approximate total of 35 for grain, 10 for scrap, five for lumber, one for ore and four for coal.

The five lumber cargoes of the month included two for United Kingdom, one intercoastal, one for South Africa and one for Korea. The vessels taken for United Kingdom will receive $19 and $17 respectively, July and August loading, compared with $30.50 paid for last March loading.

The recent decline is posing a problem for the many conferences which dictate rates for the regular line services. Upturn of the market was so rapid that many conferences were unable to keep pace.

Several matters of national interest have been topics of discussion in shipping circles. Among them are the budget reductions which will limit the number of ships to be constructed in American yards. Also of interest and concern to some operators is the prospect of increased Panama canal tolls to compensate for a proposed higher annuity asked by Panama.

Decision of the United States supreme court in the matter of the dual-rate system, adopted by steamship conferences, will have a far reaching effect upon the future of the shipping industry. A lower court has declared against dual rates and the final decision is awaited with some trepidation as an adverse opinion would upset a tradition that has been maintained, mainly by American operators, over a long period.

Proposal of Senator Warren G. Magnuson that the United States reconsider its policy of economic boycott against Red China will undoubtedly be the subject of intense discussion. In past years, the China market was one of the most important, particularly to the North Pacific.

LOW PRODUCTIVITY by waterfront unions was severely criticized by Ben H. Guill, vice chairman of the Maritime Board. He asserted that Pacific Coast longshoremen, although receiving higher fringe benefits, were not showing the results produced by stevedores at Gulf and Atlantic ports. An increase of 10 per cent, he added, in the productivity of West Coast longshoremen would mean the difference between profit or going out of business to many operators.

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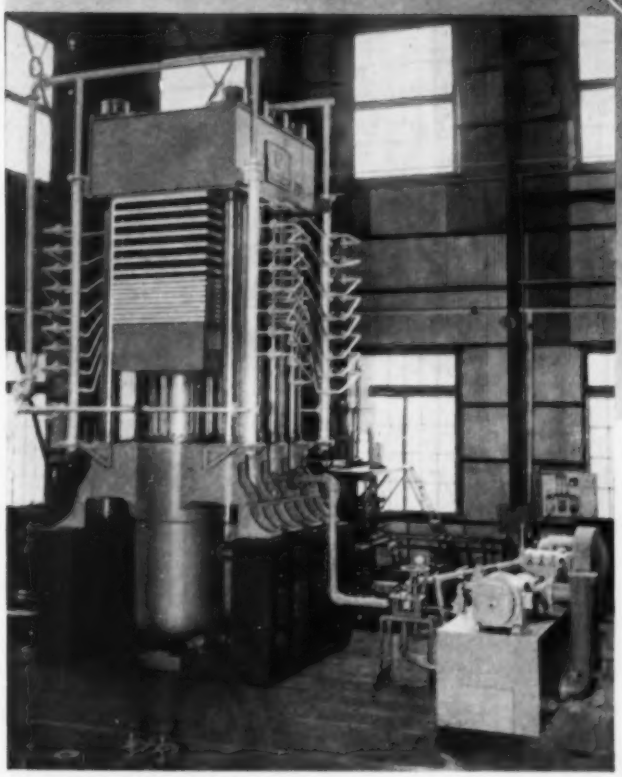

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Interested in high-volume production?

Read how two Michigan Tractor Loggers handle 600,000 board feet per day!

The logs come big—*and fast*—at Intermountain Lumber Company's Plant #2, Missoula, Montana. Spruce, larch, Douglas Fir, ponderosa pine . . . up to 6 feet in diameter, as much as 32 feet long. Intermountain needed husky log-handling equipment that was also "quick on its feet". Crawler-loaders were just too slow. But then Management heard about the Michigan Tractor Logger, decided to see for themselves. Result? Well, when these photos were taken, Michigans were at work in *four* Intermountain locations—a total of 6 machines!

Unload 30 trucks per shift

During each 8-hour shift at Plant #2 one of the Michigans unloads about 15 logging trucks . . . spreading the logs out on the ground for scaling. Then, it sorts stud logs (under 12") from saw logs and decks them accordingly. It also feeds the chain of the stud mill, which produces around 35,000 board feet of 2 x 4's per shift. Meanwhile, the other Michigan is assigned to the main mill, which produces 11,000 board feet (lumber scale) per hour. To keep this mill in production, the second Michigan Tractor Logger must unload 15 trucks of logs, too . . . sort, deck and feed them into the main mill pond.

Michigan versatility a prime advantage

In addition to their primary assignments, described above, the two Michigan Tractor Loggers handle a wide variety of "odd jobs" in and about the mills. Fitted with 2¾ yard buckets, they dig gravel from a nearby pit for haul road and yard resurfacing. By dozing or back-blad-

Left, Michigan Tractor Logger pushes load off truck; above, it places logs on conveyor to stud mill.

Forks tilt hydraulically at touch of lever to dump truck-delivered saw logs into main mill pond.

One of Michigan's many spare time jobs—digging and loading bank-run gravel to resurface mill yard.

ing, they handle yard cleanup. And equipped with big 5 yard buckets, they even plow and dispose of snow in the wintertime. According to Foreman Ray Diettert, "If it weren't for the Michigans' snow-removal job—the straddle buggies and small-wheel lift trucks handling finished lumber would have a tough time."

"Don't think any other machine could keep up!"—Operator

"Michigans are great machines," says Operator Jim Anderson. "I don't believe any other kind of unit could handle logs as well as these—and keep up the pace. They're easier to handle than other machines, take only a half-hour a day to fuel up, lubricate and service. The torque converter is a great feature, too . . . helps us a lot in our work."

You can prove this to yourself!

No matter *what* your log volume, you too—like the Intermountain people—would probably like an increase. You can *get* it . . . with a Michigan Tractor Logger! You don't have to take our word for that. Get in touch with your local Michigan Distributor. He'll be glad to arrange a *demonstration right on the job.* Ask him, too, about the many finance plans available . . . including the popular Clark no-money-down, pay-as-you-profit lease purchase plan. With it, you can put one or more Michigans to work without letting go a cent of capital. *Get the facts today!*

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DFPA Reviews Plans

(*Continued from page* 61)

• Plywood finds 25 per cent of its end use in residences, four per cent in industrial buildings, seven per cent in commercial buildings, 14 per cent in non-commercial buildings, 1.3 per cent in farm buildings, 31 per cent for maintenance and 22 per cent in industrial production.

• Housing demand is created by net additions to households, demolition replacement and net additions to vacancies.

New Members

Plywood mills voted into membership of the Douglas Fir Plywood Association were:

Bate Lumber Co., Merlin, Ore.; Caroline-Pacific Plywood, Inc., Medford, Ore.; Coos Head Timber Co., Coos Bay, Ore.; Eugene Plywood Co., Eugene, Ore.; Jefferson Plywood Co., Madras, Ore.

Lane Plywood, Inc., Eugene, Ore.; Plywood Corp. of America, Inc., Oakland, Calif.; West Coast Separator Co., Inc., Los Angeles, Calif.; Weyerhaeuser Timber Co., Tacoma, Wash.; Totem Plywood, Inc., Tacoma; Yamhill Plywood Co., McMinnville, Ore.

• Net additions to households will demand about 850,000 to 900,000 new units in 1957.

• Demolition replacements will run about 280,000 units in 1957 (due largely to expanded national highway program), above the normal 40,000 to 50,000 units in World War II years.

• Net additions to vacancies is about 70,000 units, too low for normal purposes.

• Nation is building up a housing shortage, which is being restrained by national credit policies.

• There will be about 1,100,000 housing starts in 1958.

Safety Awards

Carleton L. Smith Memorial Safety Awards for 1956 *were made to plywood firms. See THE LUMBERMANS' Safety Department in this issue for winners and their pictures.*

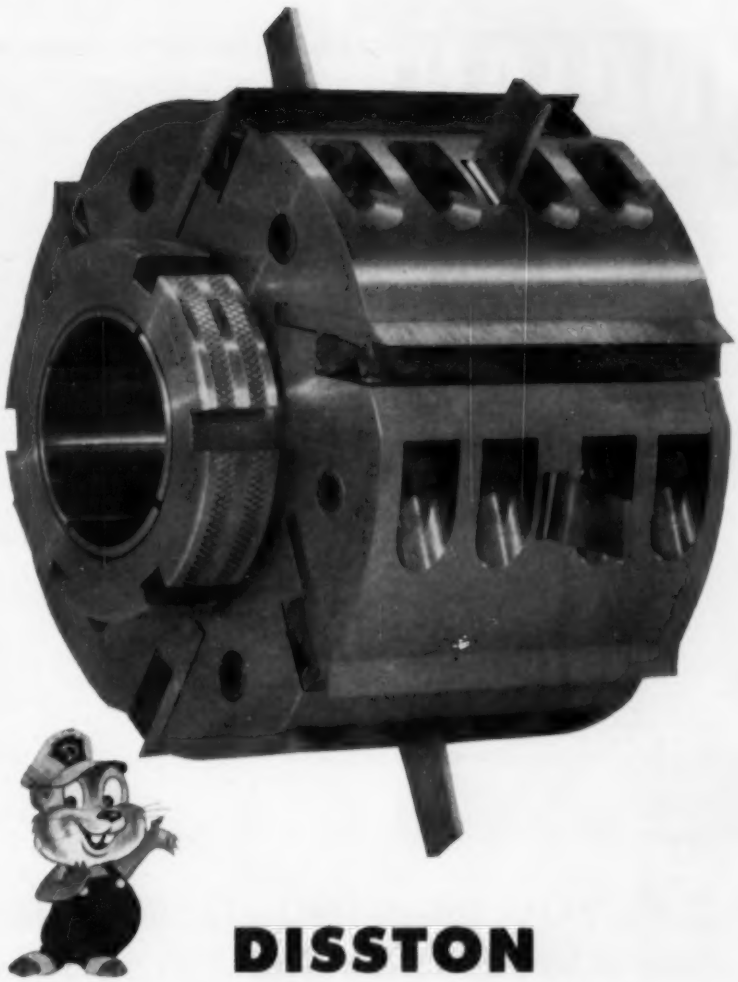
Field Promotion Stimulates New Uses for Plywood

Two representatives of DFPA's field promotion staff gave on-the-job reports of problems faced by plywood and potential new uses for the product.

• From New York, regional manager R. Stuart Williamson reported that the greatest single restriction against increased use of plywood in residences is outmoded building codes. Engineering data and performance records on plywood won't help until building codes in many municipalities are revised to permit use of plywood. Meaningful grade marking on every single piece of plywood and field inspection service will overcome this difficulty, as will educational and political efforts.

• New uses for plywood in industrial markets stagger the imagination, reported W. D. Page, regional man-

(*Continued on page* 78)



eHKP

DISSTON CUTTER HEAD

surfaces and splits 1" lumber

in one operation

The splitters in the specially-designed Disston Cutter Head shown here are clamped against a ground surface.

The head is made of two pieces permanently assembled after the splitter pockets have been machined.

Disston's exclusive manufacturing method makes it possible to grind in one plane the surface against which the splitters are clamped, eliminating the necessity of adjusting the splitters for alignments.

If you'd like more information about Disston Cutter Heads, see your Disston distributor today.

GOT A CUTTER HEAD PROBLEM? We'll be happy to supply you with any information you need on the application of Disston Generated Type Cutter Heads to your specific problem.

Write: *Henry Disston Division*
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Are "Choice for Quality the WORLD OVER"

All Seams are Electric Welded — no leakage. Pump throws 50 ft. pressure stream or nozzle adjusts for spray. Strongly built — lasts for years.

USES ONLY CLEAR WATER

No chemicals needed. For over 80 years INDIAN FIRE PUMPS have been first choice for fighting grass, forest, building, roof, rubbish fires, etc. Insulated tank prevents dampness touching the back.

Fire Chief S. W. Griswald says: "I cannot praise INDIANS highly enough. There is nothing else will match them." Another chief says: "They are worth their weight in gold."

The INDIAN is also made with lever type pump and handle

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How Plywood Can Increase Its Markets

Managing director W. E. Difford called on association members to increase sales and better their price return by developing more end-use plywood products, which get away from selling straight 4x8 panels.

Examples cited:

• Plywood box beams, which can be fabricated, lend themselves to long spans.

• Styrofoam sandwich type panels—two fir plywood skins with framed polysterene core—provide high strength plus good insulation.

•Stressed skin panel vault—two long plywood panels with impregnated honeycomb core between them.

• A 32 foot square domical roof system—four arched plywood skins supported only at four corners.

• Folded plate roof structure—thin plywood skin, reinforced by wood purlins, which rest on four concrete posts. Roof has an accordian effect, with two tilted planes that lean against each other with each plane acting in support of other.

(*Continued from page* 77)

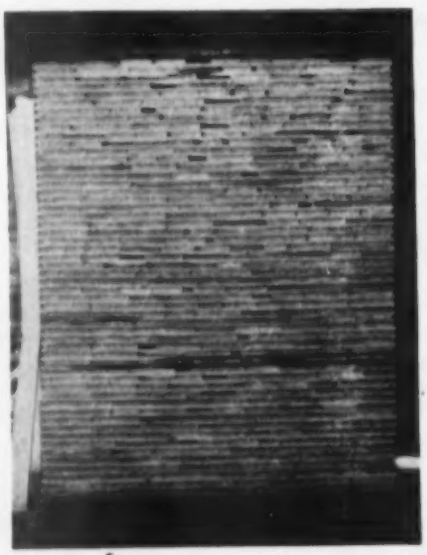
ager from Chicago, who illustrated his points with slides. To capture these markets the plywood industry must supply material cut to size and carry on vigorous promotion.

This new approach to industrial marketing calls for:

- Promotion of specific ideas with general application.
- Providing custom design and supplying samples.
- Working closely with potential fabricators.
- Following up to see what's being done.

Specifically, there are vast markets in industrial pallets (some 49½ million units are used, which would require 2½ month's production of the entire fir plywood industry), separators for industrial processes, bins and trays, palletized boxes, etc. Samples of these end use products were displayed.

ARE YOU SHIPPING GREEN LUMBER? If You Are, You Already Know The Advantages of Modern Kilns!



Whether your requirements are large or small—whether you wish to dry many species and thicknesses, or only wish to dry for shipping weights—there is a Moore Kiln designed especially for your requirements and within your budget.

Dry kilns, like automobiles, are built in many sizes and models—from the Jeep to the Cadillac. We can furnish you with the size and type dry kiln you want and within your price range.

Write our nearest factory for complete facts, specifications and prices on kiln facilities best suited for your need. No obligation, of course!

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Sturdy PW-132 Combination Chain with attachments provides 50% more wearing surface on the carrying strand than regular C-132 . . . plus nearly 300% more wearing surface on the return. These large flat surfaces give PW Combination Chain up to 50% longer life where abrasive matter is encountered.

◆ for lumber transfer

H Type Mill Chain has flared-out sidebars which form broad wearing shoes for dragging over runways, giving longer life to chain. H Type Mill is an exceptionally durable chain, designed for speedy operations where shocks are frequent and semi-gritty conditions are encountered.

for refuse disposal ◆

This double-strand H Type Refuse Chain has a long wearing surface through the head of the chain, insuring alignment and longer life. Wearing lugs on the sidebars protect the head of the pin and an ample wearing shoe safeguards against trough wear. Also available is Combination C Type Refuse Chain with larger diameter pins and higher strength.

To find out how *you* can *profit* with Jeffrey Chain, contact your nearby Jeffrey authorized distributor, or write to The Jeffrey Manufacturing Company, Columbus 16, Ohio.

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Engineers Discuss Automation

A WOOD INDUSTRIES Section at the semi-annual meeting of the American Society of Mechanical Engineers, held in San Francisco, Calif. on June 9-14, 1957, considered the following subjects:

Remote Control Systems for Setting Sawmill Carriages

(L. E. Gensman, Monarch Forge & Machine Works, Portland, Ore.)

More than 300 remote setworks systems have been installed in sawmills in the past four years, mostly in the Pacific Northwest. Starting with stud mills requiring about 5000 sets per day or more than 10 sets per min., they have been refined and improved to where in even the most diversified sawmill, there is potential advantage in their use.

Since almost all of the disadvantages of the remote setting systems are technological, it is probable that most of these will be overcome within the near future. A certain element of controversy has existed for several years between manufacturers of remote-setworks equipment due to patent considerations. It appears that this situation will be largely clarified within the next year or so. This should enable further progress to be made in this most important field.

Equipment similar to that used on carriages undoubtedly will be applied to resaws and edgers, as well as to any other sawmill machinery requiring accurate positioning. One manufacturer is presently producing a linebar resaw so equipped. There is nothing in the requirements of remote setworks that would preclude the application of types of servomechanisms to sawmill machinery.

It is to be expected that much greater development in this direction will be made. It appears presently that only the limiting factor is an apparent fixation in the part of some sawmill operators; a feeling that the only satisfactory method of making lumber is the one used by grandfather. It may take a new generation of operators to overcome this, but inexorably the sawmill operators who do not embrace modern technology will be forced out by those who do.

Wood Equivalents

(S. M. Batori, Controls and Communications Co., Eugene, Ore.)

Mr. Batori presented a complete set of tables giving factors for converting logs to boards, plywoods and products from residuals. This covered board feet, peeler logs, pulpwood logs, chip equivalents, hogged fuel equivalents, unit equivalents, etc.

A Mechanical Unit for Taper Sawing

(M. H. Mater and J. M. Matuszak, Mater Machine Works, Corvallis, Ore.)

Taper sawing is the process of cutting nonwedged boards from the periphery of a log of nonuniform diameter. By eliminating cross-grained boards produced from the surface of a tapered log lumber quality is upgraded.

Several devices used to accomplish taper sawing include the tapering block, the tapering plate, and the special power tapering knee. Each has inherent disadvantages. One type requires time for setting up which slows production. Each provides only a certain amount of taper setting which limits the sawyer's efforts to obtain top-grade lumber.

Mr. Mater and Mr. Matuszak presented a complete description of the development and operation of the taper coupling. The standard knee moved by using the taper coupling provides tapering forward or back to any desired amount with the use of existing power. By remote control the sawyer can establish the taper for the next log while the carriage is returning after dropping the backstand. Thus lumber from tapered logs can be more accurately up-graded and at the same time production can be increased.

Early this year this taper coupling had been installed on four new carriages. They were purchased by firms located at Monson, Maine; Sumter, South Carolina; Forsythe, Georgia;

(*Continued on page* 98)

SPACE PROBLEM?

That's one of the advantages to a Rader High Pressure pneumatic conveyor: there's no space problem involved. The Rader conveyor does its job equally well suspended over the yard, in a horizontal or vertical position, underground or under water. You save space with the elimination of bulky sheds, expensive fire prevention devices and guards on machinery. The product you're moving—be it chips, hogged fuel or something else—is completely enclosed by the pipe as it speeds on its way. There's no mess, no fire danger and no expensive upkeep to consider. Cost? Up to 70 per cent cheaper than old fashioned conveying methods.

Rader line goes underground.

Rader *Solves* Conveyor Problems

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Packaging and unloading method speeds handling

STERLING LUMBER AND SUPPLY COMPANY, Chicago, Illinois, has been a major contributor to development of packaging and shipping methods that speed loading and unloading of dimension lumber shipped in box cars. The result is a technique that allows full utilization of mechanical handling equipment by lumber shippers and receivers. (Idea No. U1-11.)

Sterling Lumber called in Acme Steel Company to cooperate in the development of this new technique. Now, packages of lumber are made up at the mill and strapped with heavy-duty Acme Steel Strapping. Lift trucks load the packages in double-door box cars in a fraction of the time required for manual loading. At destination, packages can be removed in stacks of three with a large lift truck, or one at a time with a small lift truck, after cutting the interlace stack bracing straps. At Sterling's Chicago yard, working with a 6,000 lb. lift truck in the car and a 15,000 lb. lift truck at ground level, 3 men unload 35,000 board feet in as little as 21 minutes!

B. J. Malloy is typical of the Acme Idea Men who can help you solve your lumber packaging and handling problems.

***Work with your Acme Idea Man.** His wide experience in product protection and materials handling is at your disposal. He will be glad to detail scores of money and time-saving Ideas-in-Action such as the lumber packaging and unloading technique now in use at Sterling Lumber. Call him at your nearest Acme Steel office or write: Dept. LBU-57, Acme Steel Products Division, Acme Steel Company, 1025 Sixth Ave., South, Seattle 4, Washington. Also Portland, Oregon.

ACME STEEL **STEEL STRAPPING**

Protect Your Tractor Rollers Against Grease Loss

Sure-Seal®

ROLLER SEALS

Give Double Protection

Special inner seal expands when pressure lubricated, keeps grease from reaching bellows.

Sure-Seal Tractor Roller Seals have an inner seal in addition to the regular outer seal to lock dirt and moisture out and keep grease in. High pressure lubrication can't hurt Sure-Seals—it seals them tighter from the inside without strain on the bellows. Made for Caterpillar D-4, D-6, D-7, D-8, D-9, TD-14, TD-18 and TD-24. See your tractor dealer.

Locks Grease In—Dirt Out

Sure-Seal Equipment Co.

1820 N.W. 25th Avenue

Portland 10, Oregon

DFPA Awards

(*Continued from page* 23)

in Division I (100,000 hours or less); United States Plywood Corporation, Kosmos Div., Kosmos, Wash., whose veneer plant worked 55,808 hours in 1956 without a lost time accident.

Simpson Logging Co., Idanha, Ore., whose veneer plant worked 63,663 hours in 1956 without a lost time accident.

In Division II (100,001 to 500,000 hours) the Fortuna Veneer Co., Fortuna, Calif. received a trophy and plaque as winner. The plant worked 479,598 hours with two lost time accidents and a frequency-rate of 4.17. The same plant also received the Improvement Award, for lowering its frequency rate from 15.44 in 1955 to 4.17 in 1956, a 73 per cent improvement.

In Division III (500,001 hours or over), Weyerhaeuser Timber Co.'s plywood plant at Longview, Wash. won the award for working 737,938 hours in 1956 with three lost time accidents and a frequency rate of 4.07.

More than one fourth of the softwood lumber output of the United States, about 46 per cent of all plywood and about 25 per cent of all hardboard produced in the nation comes from Oregon.

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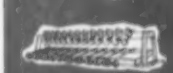

EDGERS. A complete line of both Stub Type and Table Type Edgers in a wide range of sizes are available.

TRIMMERS. Air and Wheel Type Trimmers for sawmill and planing mill application . . . available in the size to meet your need.

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13 Unit H.D. Air Trimmer to: Fitzer Brothers Lbr. Co. in Buckley, Wash.
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*CALOR GAS COMPANY helped pioneer the development of LP-Gas direct-fired Plywood Veneer Dry Kilns...supplying LP-Gas know-how and assured supply. Contact us for details on our storage facilities lease plan.

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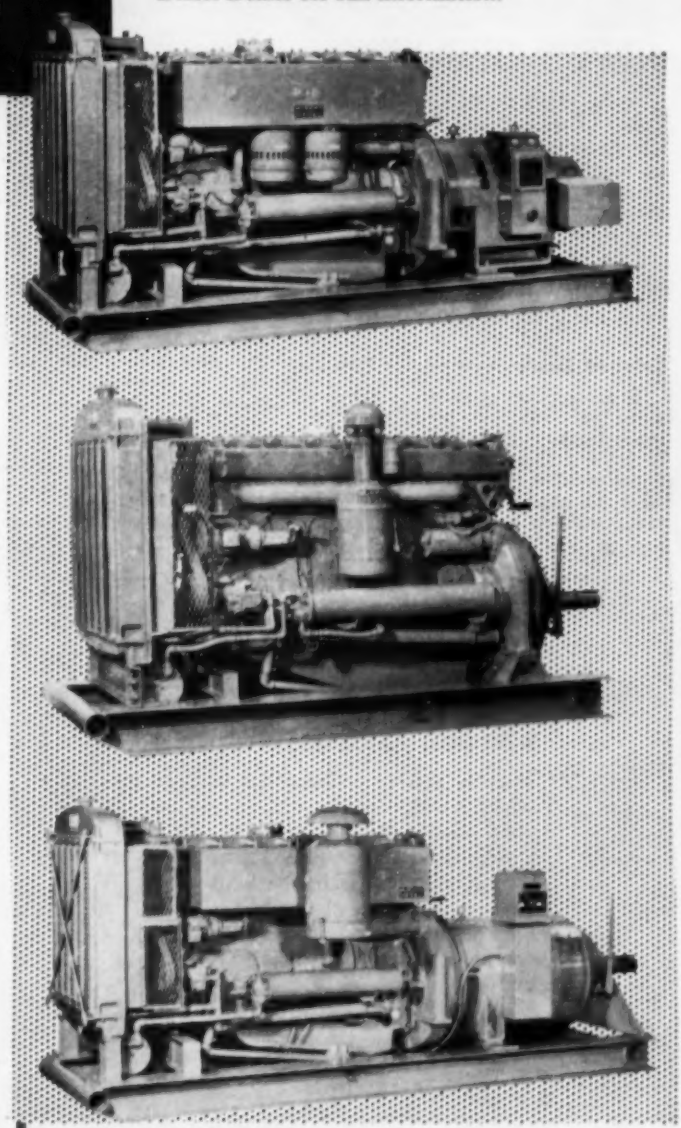
The *right* kind of power for your mill is profitable power—heavy-duty power that meets your needs, dependably, and with minimum fuel costs . . . power that reduces downtime . . . responsive power with the lugging characteristics necessary for sawmill work.

In the complete Murphy Diesel line you get this kind of power in a choice of types . . . mechanical, electric, or both. Ask your Murphy Diesel Dealer for full information.



When your mill is operated electrically . . .

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ELECTRIC GENERATOR SETS

Murphy Diesel Electric Generating Sets are engineered as unified electric power packages in models delivering from 64 to 165 K.W. They may be radiator or heat exchanger cooled and equipped for manual or remote starting. They are complete packaged units providing a power source for all requirements.

When your mill is run mechanically . . .

MURPHY DIESEL ENGINES

AND POWER UNITS

Heavy-duty Murphy Diesels are available as engines or standard power units or with extended shaft and outboard bearings; radiator or heat exchanger cooling. Altitude models which maintain sea level ratings up to 9000 ft. are also available. Sizes range from 96 to 264 H.P.

For both mechanical and electric power . . .

MURPHY DIESEL MECH-ELEC UNITS

The Murphy Diesel Mech-Elec Unit is a combined power package which delivers electric power and mechanical power separately *or simultaneously* . . . the convenient, economical answer for jobs that require efficient mechanical power for the major load plus flexible electric power for secondary loads.

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MURPHY DIESEL

MURPHY DIESEL COMPANY

5351 W. Burnham St., Milwaukee, Wisconsin

SALES . . . PARTS . . . SERVICE

Throughout the Nation

Overtime

(*Continued from page* 33)

he should be entitled to receive $1.60 for each of the first 40 hours and $2.40 (one and one-half times $1.60) for each hour thereafter.

If an employe is hired at a salary say of $56 for a 40-hour week, his regular rate is $1.40 an hour. If his salary is $56 for a 50-hour week, his regular rate is $1.12 per hour. Where the salary covers a period longer than a workweek, such as a month, it should be reduced to its workweek equivalent.

A monthly salary is subject to translation to its equivalent weekly wage simply by multiplying by 12 (number of months) and then dividing by 52 (number of weeks). A semi-monthly salary is also to be translated to its equivalent weekly wage by multiplying by 24 and dividing by 52. Once the weekly wage rate is arrived at, the hourly rate should be calculated as indicated above.

Salaried Employe—Irregular Hours

If an employe in your organization earns say $66 per week with the understanding that his salary is to cover ALL hours worked and if his hours of work fluctuate from week to week, his regular rate of pay will vary from week to week and will be the average hourly rate each week.

Suppose, for example, that during the course of four weeks the employe works say 40, 44, 50, and 47 hours. His regular hourly rate of pay in each of these weeks is approximately $1.65, $1.50, $1.32, and $1.40, respectively. Since the employe has already received straight-time compensation on a salary basis for all hours worked, *only* additional half-time should be due.

For the first week the employe should be entitled to be paid $66; for the second week $69 ($66 plus 4 hours @ 75 cents or 40 hours @ $1.50 plus 4 hours: $2.25); for the third week $72.60 ($66 plus 10 hours @ 66 cents or 40 hours @ $1.32 plus 10 hours @ $1.98); for the fourth week approximately $70.90 ($66 plus 7 hours @ 70 cents or 40 hours @ $1.40 plus 7 hours @ $2.10).

Employes Working at Two Rates

If an employe in your firm in a single workweek works at two or more different types of work for which different basic hourly rates of not less than $1.00 an hour have been established, his regular rate for that week is the weighted average of such rates. His total earnings, except statutory exclusions, from all such rates should then be divided by the total number of hours worked at all jobs.

Excluded Pay

The following payments are considered to be *excluded* from the regular rate as provided for by the so-called statutory exclusions:

- Sums paid as gifts at Christmas time or on other special occasions.
- Payments for unworked time due to vacation, holiday, illness, or failure of employer to provide sufficient work to employe.
- Payments determined at the discretion of employer and not made by any prior-contract or agreement, or promising causing employe to expect such payment.
- Contributions to pension or retirement or old-age, life, accident, or health insurance plans.
- Premiums for work above daily or weekly standards such as 8 hours in a day or 40 in a workweek.
- Premiums for work on Saturdays, Sundays, holidays, regular days of rest, or sixth or seventh days of the workweek.
- Premiums for work outside the regular workday or workweek and not as a result of an employment contract or collective-bargaining agreement.

Overtime pay is expensive enough without making it more so by mistakes in computation. However, the old stumbling block is still tripping up employers in the forest products industries. Your firm may be able to cut a sizeable amount from its overtime bill by knowing what payments have to be made and using the proper method of computing overtime.

Your firm may also cut wage-hour overtime costs simply by making sure that as many as possible of its supervisory workers qualify as exempted. However, before you can figure out if your employes have been given all the overtime pay they are entitled to, your management should first of all know what their regular rate of pay is. Now is the time to start computing overtime to see if you are paying too much.

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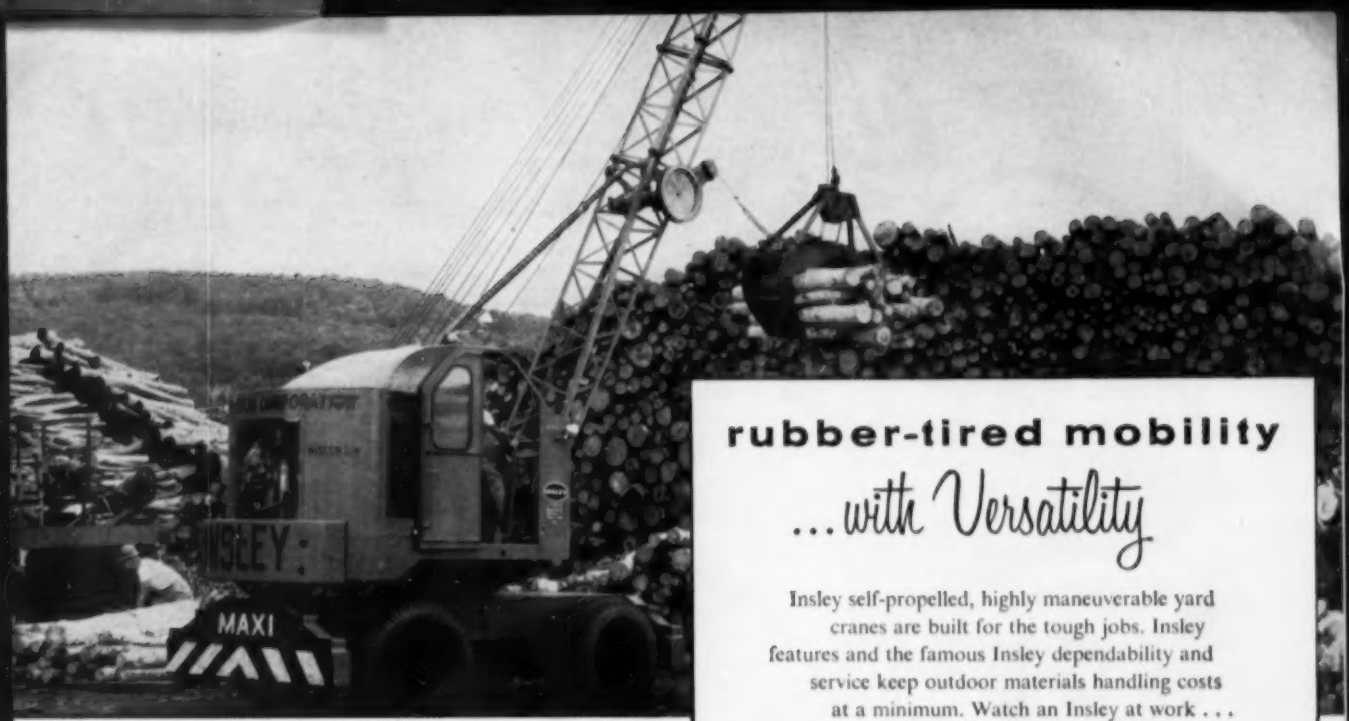
Annotated Bibliography Of Redwood Forests

Under the direction of Emanuel Fritz, professor of forestry emeritus, University of California, an annotated bibliography of literature on the California coast redwood tree and forests is available. It costs $7.50 and copies are limited in number.

The 288-page book lists more than 2000 articles, bulletins, books and reports classified by subject matter, including history, botany, forest management, protection, lumbering, products, recreation and aesthetics. It was published by the Foundation for American Resource Management, 582 Monadnock Building, San Francisco 5, Calif.



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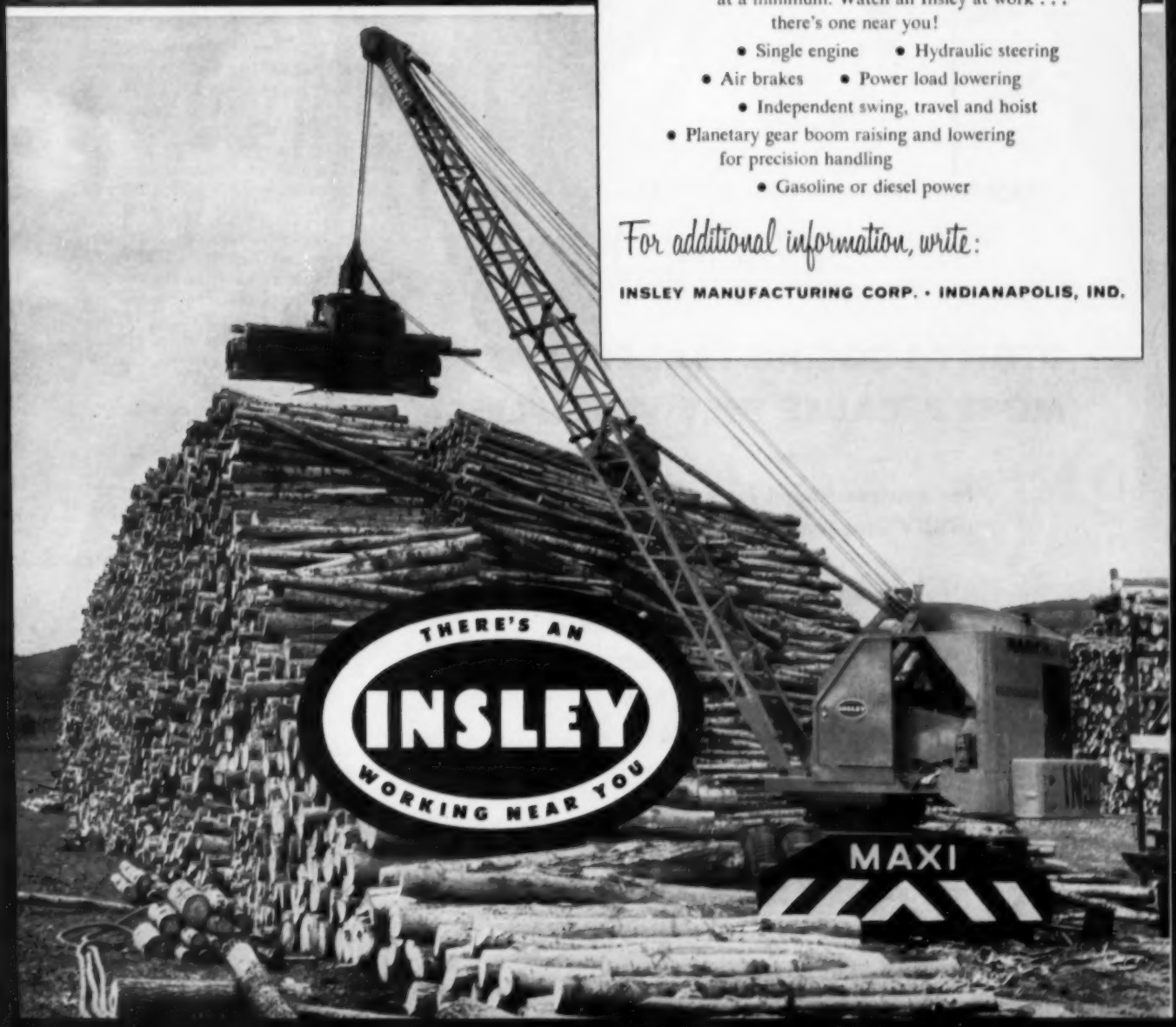

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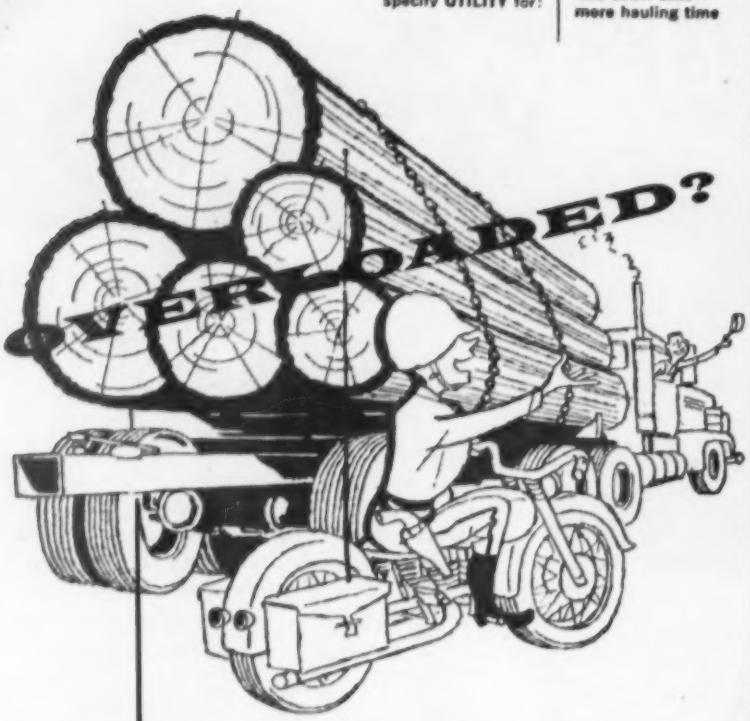

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B. C. Lumber Group Elects Strom

Alfred W. Strom, manager of Tabor Creek Sawmills, was elected president of the Northern Interior (B. C.) Lumbermen's Association at the annual meeting in Prince George late in May. He succeeds T. H. (Tom) Dilworth, general superintendent, Prince George Planing Mills. New vice-president of the 75-member group is R. W. Hilton, manager of Shelley Sawmills.

Four new directors were chosen and three were re-elected: C. T. Clare, chairman of the finance committee; M. E. Rustad, forestry; A. Stauble, labor; Gordon Brownridge, transportation; H. Bacheland, safety and first aid; Gordon Beaven, grading and marketing; A. J. Trick, membership.

"In spite of a greatly depressed market, it has been a fairly satisfactory year," reported retiring president Dilworth. "We have presented a solid front in meeting our problems."

One of those problems, the high cost of transporting lumber, was discussed by Roy McGillivray, chairman of a special committee. He said he could see little hope of maintaining freight rates at even the present high level. Increase on Canadian lines has been as much as 12% during the past year, he said.

Hans Roine, chairman of forestry committee, said the current year would be a difficult one and he stressed the need for adjustment of stumpage fees to correspond with prevailing market prices. Establishment of a grading program was announced by Gordon Beaven.

Sawmill accident frequency rate in member mills was reduced to 53.00 from the 1955 rate of 73.72 and logging frequency rate was also down, according to safety committee chairman Gordon Styles and NILA safety director Fred Wade.

Secretary-manager R. J. Gallagher in his report stated that the association's influence was being felt throughout the industry.

Larry Eckhardt, vice president of the B. C. Truck Loggers Association, was a guest speaker. He predicted that the Sloan Commission report on forestry would be presented to the government in July and that the report would indicate that industry is still only "scratching the surface" of forest utilization.

"Nothing will be heard about utilization in this area until there is at least one pulp mill near Prince George," said Eckhardt.

medieval skill in modern dress

Yates-American

thin knives

cut more footage between grinds

When you examine a sword, you are looking at a weapon whose origin is buried deep in the shadows of man's history. There is no direct evidence of the actual origin. Daggers have been found shaped from reindeer antlers. Flint daggers from the Neolithic period may have been forerunners of the first hand weapons made from copper.

Later, as man continued his search for a weapon with a fine cutting edge, he made his weapons from steel. Soon, word began to spread far and wide that in the city of Damascus there were craftsmen who could make a steel that was wonderfully hard — steel that would long retain its fine cutting edge in combat and yet was completely flexible — proud achievement of the craftsmen of that day.

We at Yates-American take the same kind of pride in our work. For over 73 years we have been making not swords, but knives — knives for industry where the quality of a blade is measured not in combat but in performance.

Today, with these accumulated years of skill and experience behind us, we can justly claim that Yates-American thin knives are the best you can buy. Our knives hold their fine cutting edge longer, giving greater footage between grinds, due to the special steels made from formulas created to meet the specific demands of modern industry. Yates-American thin knives are tough, resist nicking, and stay sharp longer — as much as 20% to 30% longer between grinds!

If you have special requirements in knives, send us blueprints and specifications. We shall be pleased to send you a quotation—without obligation of course.

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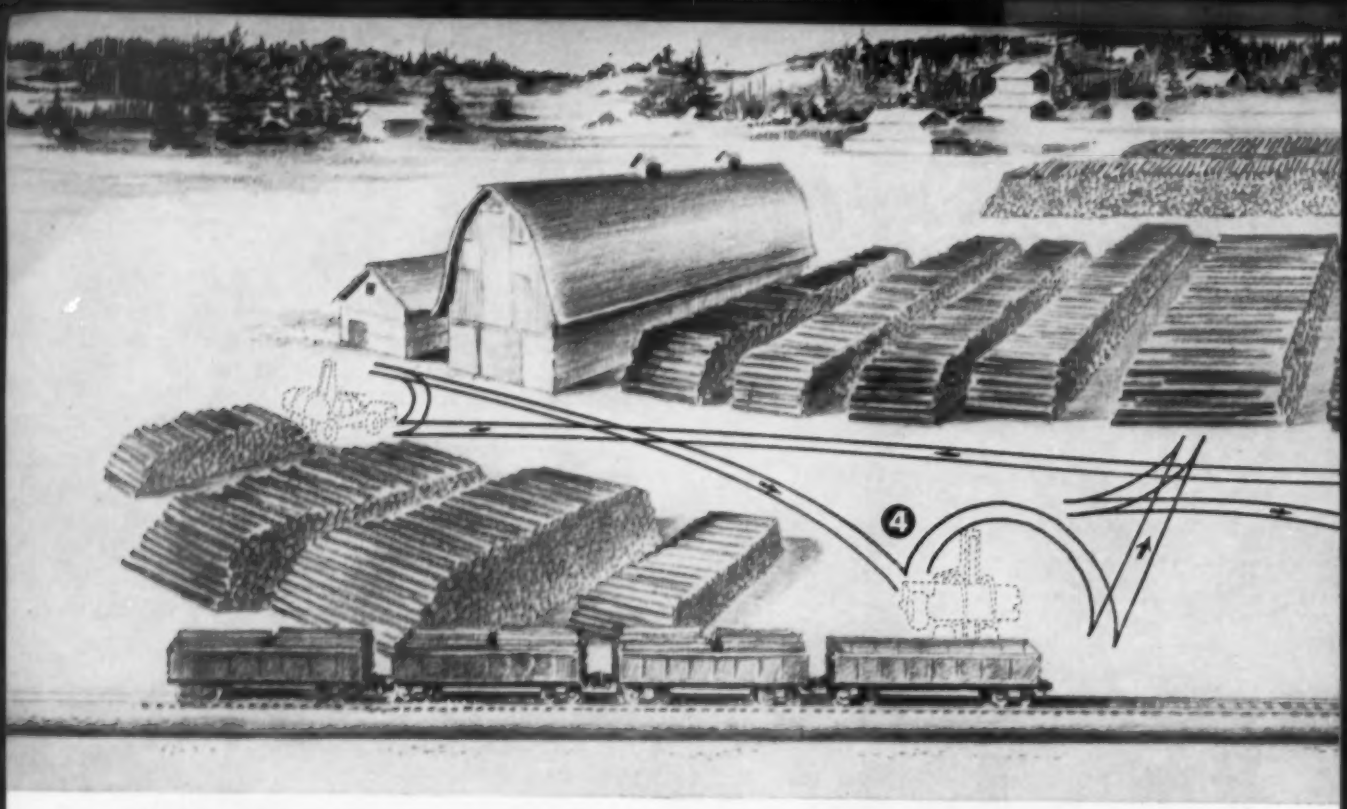


LETOURNEAU Log Stacker does five jobs

This mill, in northern Idaho, has a daily capacity of 300,000 board feet. To keep pace with this production, a LeTourneau Log Stacker in the unloading and decking area keeps pulp, peelers, and saw logs moving in the proper channels . . . which means that it must do many different jobs in many different areas of the big yard.

JOB STUDY POINTS UP VERSATILITY

The drawing above shows just one cycle of a typical day's activities . . . a cycle repeated with variations for eight operating hours during a one-day job study and analysis made soon after this company bought its LeTourneau Log Stacker. Jobs illustrated are:

1 Unloads Trucks 2 Builds Cold Deck 3 Sorts Logs
4 Loads or Unloads Rail Cars 5 Feeds Logs to Mill Pond

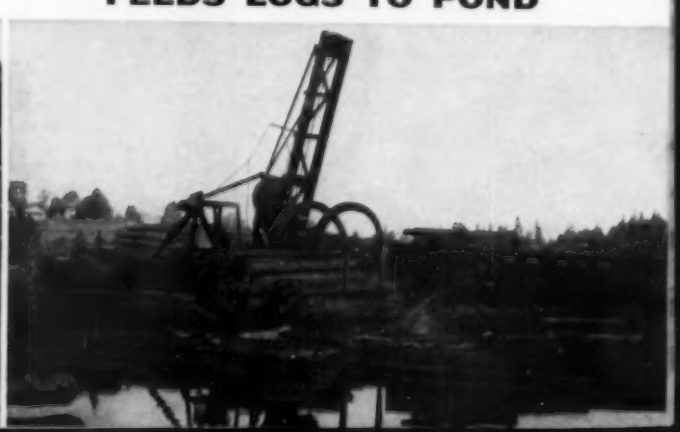
All five jobs are handled by the Stacker and one operator. On the day this study was made, the Stacker unloaded **257,225 board feet** from **63 trucks.** The handling operations, as charted in the yard and tabulated on an engineer's report, show the following totals — Scribner scale as recorded by mill scalers:

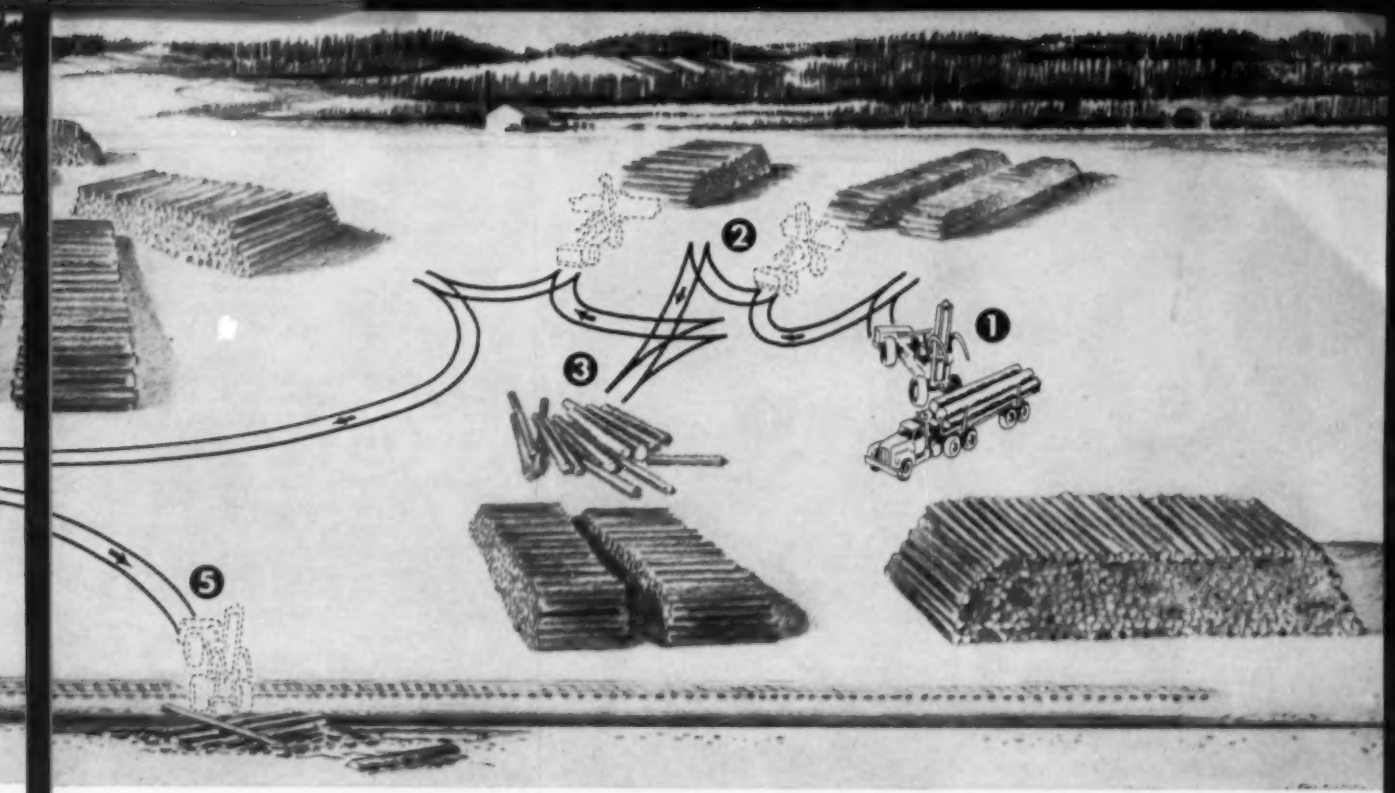
	Board Feet
Fed to pond directly from trucks	235,345
Cold decked directly from trucks	21,880
Fed to pond from cold decks	16,160
Handled from deck to deck	11,940
TOTAL BOARD FEET HANDLED IN 8 HOUR OPERATING TIME	285,325

DURING THE PEAK OF THE LOGGING SEASON THE LeTOURNEAU LOG STACKER OPERATED 12 TO 14 HOURS A DAY AND HANDLED AN AVERAGE OF 350,000 BOARD FEET.

UNLOADS TRUCKS

FEEDS LOGS TO POND





in busy Idaho mill yard

DIESEL-ELECTRIC POWER DOES THE JOB

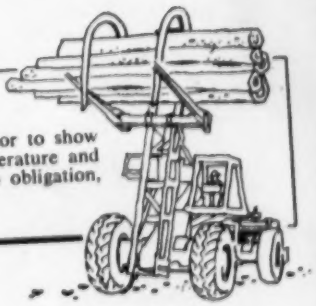
Speed, capacity, and versatility for handling 300,000 board feet per day are made possible by the exclusive LeTourneau System of Electric Power and Control. Here's how it works on the Stacker:

1. Diesel-Electric Power — Constant-speed engine and big electric generators maintain top efficiency all day long, under capacity or light loading.

2. Tractive Power with LeTourneau Electric Wheels — Each wheel a prime mover with its own short-coupled gearing and direct motor drive. All forward and reverse motion, braking, speed, and power controlled by simple swinging-arm rheostat.

3. Every Function Powered — Locally-placed LeTourneau Gearmotors, ready to work on an instant's notice, power the raising and lowering of forks, tusks, boom tilt, and steering. Just touch a switch, and the Stacker becomes a steel-fingered extension of the operator's will.

See the Stacker at Work . . .
Ask your LeTourneau distributor to show you one in action. Write for literature and name of nearest distributor. No obligation, of course.



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LOGGING EQUIPMENT DIVISION
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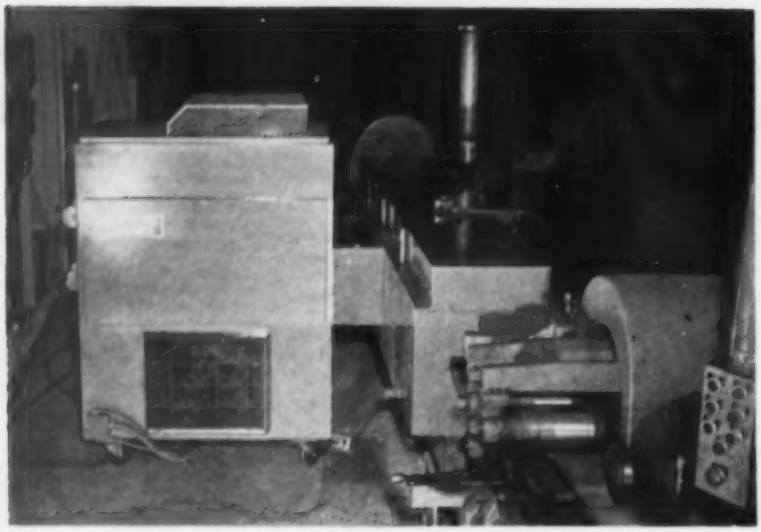

ABOVE: Mann-Russell Model 500 RF Generator (15 kw output) powering custom-designed M-R electrode for rapid curing of end-glued finger joints; in foreground is Randall Fenton joint assembly.

RIGHT: Discharge end of Mann-Russell edge-gluing unit. Both installations are in Arcata Redwood Co. Brainard Yard, Arcata, Calif.

NOW! Mann-Russell offers a complete package unit for recovery of waste stock.

THE Arcata Redwood Co. installations are examples of Mann-Russell customized engineering which makes possible the efficient, economical recovery of waste stock—utilizing high-speed electronic gluing equipment. Mann-Russell can supply:

- **Finger Joint Assembly Unit**
- **High Frequency Unit for Curing End Joint Adhesive (Generator and Electrode System)**
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- **Continuous or Batch-type Edge Gluing Equipment**

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Governor's Conference Meets in California

Talks on the "Use and Abuse of Rigging Equipment", and "Preventive Maintenance", and election of officers were highlights of the semi-annual meeting of the Northern California Forest Products Section, Governor's Industrial Safety Conference in San Francisco, Calif. in June.

Presiding over the meeting was Herbert McMahan, Ralph L. Smith Lumber Co., Anderson. R. P. Haughey, safety engineer, California Division of Industrial Safety and consultant to the forest industries section, assisted McMahan at the meeting.

R. W. Lyons, Skookum Co., Portland, Ore., and Charles M. McBee, a former high climber, and now a safety engineer, Oregon State Industrial Accident Commission, Salem, gave the joint talk on use and abuse of rigging equipment. They stressed the need for advance planning on rigging up, for smaller operations which sometimes neglect this phase of logging. They pointed out that a poorly planned show is hazardous and also inefficient.

Higher horsepower and greater speeds with modern logging equipment have brought new safety problems to the woods, the speaker said. It was pointed out that loggers should be sure their lines are large enough for the job, since smaller lines, overloaded are hazardous and a cause of expense.

The need for pre-inspection of rigging was stressed, for it was pointed out that great trouble can be caused by defective blocks and forgings. Cracks on the surface, worn parts and loose pins should be noted. The correct hanging of blocks was also stressed.

Laurence B. Haller, Magnaflux Corp., Oakland, gave an illustrated talk showing the use of the Magnaflux method in finding fatigue cracks in crane hooks, fork lift arms, truck axle spindles and truck steering arms. Haller told the group that the time to make these inspections was at overhaul time, and that fatigue cracks can be caught and removed before they become dangerous.

New officers for the group were elected and are: Sidney Mackins, Simpson Redwood Co., Arcata - management; and Clifford Toothman, International Woodworkers of America, AFL-CIO, president Local 13428, High Sierra Pine Mills, Oroville, co-chairmen.

R. P. Haughey, safety engineer, California Division of Industrial Safety continues as consultant to the group.

Manager Dies

Mr. Ernest B. Brown, general manager of Whakatane Board Mills Ltd., Whakatane, died on May 25.

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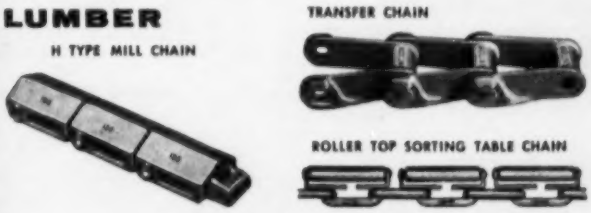

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WASTE

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Like all Portalloy chains, longer life at no additional cost.

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Columbia River Log Prices

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Douglas Fir Sawlogs: No. 1 $64-69; No. 2 $51-56; No. 3 $42-47.
Hemlock: Peelable $59-64; No. 1 $55-60; No. 2 $43-48; No. 3 $39-44.
White Fir: Peelable $58-63; No. 1 $55-60; No. 2 $45-50; No. 3 $43-48.
Noble Fir: Peelers $58-63; No. 1 $56-61; No. 2 $53-58; No. 3 $43-48.
Cedar: No. 1 $93-98; No. 2 $37-42; No. 3 $35-40.
Spruce: Select $103-108; No. 1 $80-85; No. 2 $52-57; No. 3 $37-42.

Grays Harbor Log Prices

Douglas Fir Peelers: No. 1 $108-113; No. 2 $98-103; No. 3 $81-86.
Douglas Fir Sawlogs: No. 1 $60-65; No. 2 $58-63; No. 3 $43-48.
Hemlock: Peelable $58-63; No. 1 $53-58; No. 2 $41-46; No. 3 $39-44.
Cedar: No. 1 $78-83; No. 2 $46-51; No. 3 $34-39.
Spruce: Select $88-93; No. 1 $63-68; No. 2 $45-50; No. 3 $42-47.
White Fir: Peelable $58-63; No. 1 sawlogs $53-58; No. 2 $42-47; No. 3 $41-46.

Puget Sound Log Prices

Douglas Fir Peelers: No. 1 $108-113; No. 2 $98-103; No. 3 $82-87.
Douglas Fir Sawlogs: No. 1 $63-68; No. 2 $56-61; No. 3 $39-43.
Hemlock: Peelable $58-63; No. 1 $53-58; No. 2 $41-46; No. 3 $37-42.
White Fir: Peelable $59-64; No. 1 $54-59; No. 2 $42-47; No. 3 36-41.
Noble: Peelable $.....; No. 1 $63-68; No. 2 $53-58; No. 3 $41-46.
Cedar: No. 1 $83-88; No. 2 $49-54; No. 3 $36-41.
Spruce: Select $87-92; No. 1 $62-67; No. 2 $40-45; No. 3 $38-43.

British Columbia Log Market

Reported by C. D. Schultz & Co., Ltd., Vancouver, B. C., consulting foresters and engineers.

(Log prices are per thousand feet board measure.)

FIR—Log stocks have increased considerably in the past month as fir mills refuse to build up log inventories. Price range remains steady at $50.00 to $60.00 for #3's, $60.00 to $70.00 for #2's and $70.00 to $80.00 for #1's.

Peeler price range is $80.00 to $90.00 for #3's, $90.00 to $100.00 for #2's and $100.00 to $110.00 for #1's.

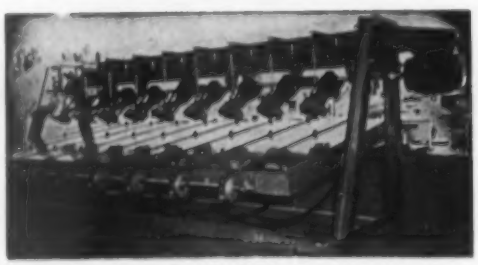
CEDAR—Stocks have maintained the high level of the previous three months. Price range is now $35.00 to $40.00 for #3's, $45.00 to $50.00 for #2's and $57.50 to $62.50 for #1's. Tie cedar price has decreased in the last month and now is selling for $30.00 to $37.50.

A small volume of lumber cedar is trading at $70.00 for #1's and $60.00 for #2's.

HEMLOCK & BALSAM—Stocks of hemlock and balsam have maintained their high level. Hemlock prices remain firm at $37.50 to

(*Continued on page* 94)

We Manufacture All Types
MODERN SAWMILL MACHINERY



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Designed especially for the Modern Sawmill Operator who wishes a machine to cut accurately with minimum cost and maintenance. Over 150 new machines installed in the past 10 years backs our claim that our machines are among the best.

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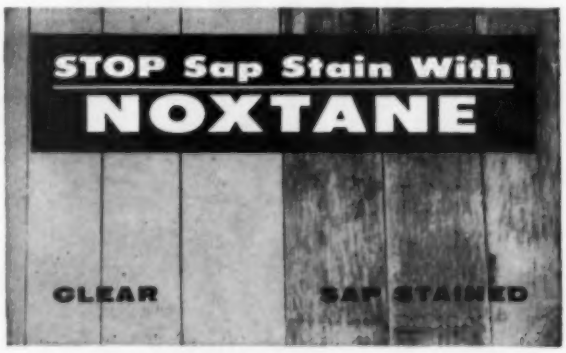

SAVE UP TO $150 PER MBM! Prevent sap stain with NOXTANE at a cost of only a few cents per thousand board feet.

NOXTANE dip or spray is a *complete* formulation—*no mixing!* Keeps lumber bright, clear, stain-free. Easy to use—can't harm hands. Dissolves rapidly . . . no arsenic or mercury . . . non-irritating and dustless . . . resists leaching from rain . . . controls surface mold and decay organisms. Conveniently packaged in 10 lb. bags. Just mix one bag to 100 gallons of water.

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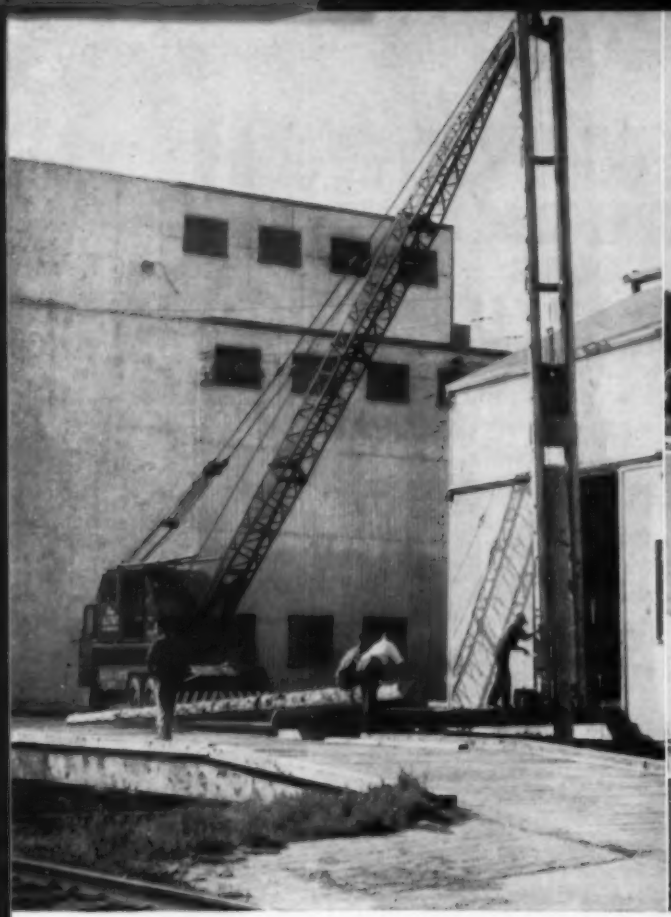

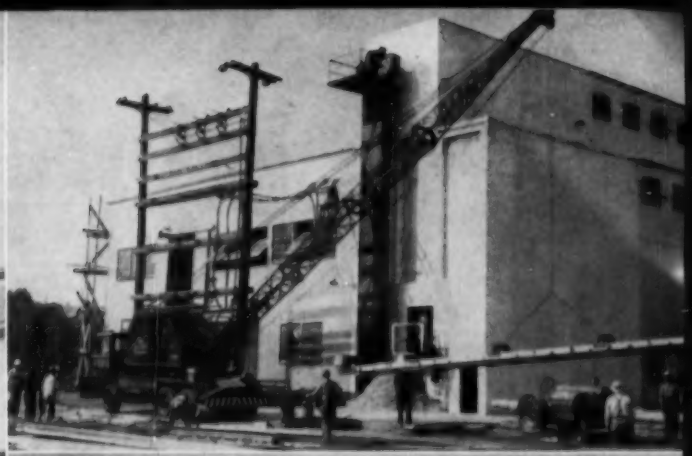

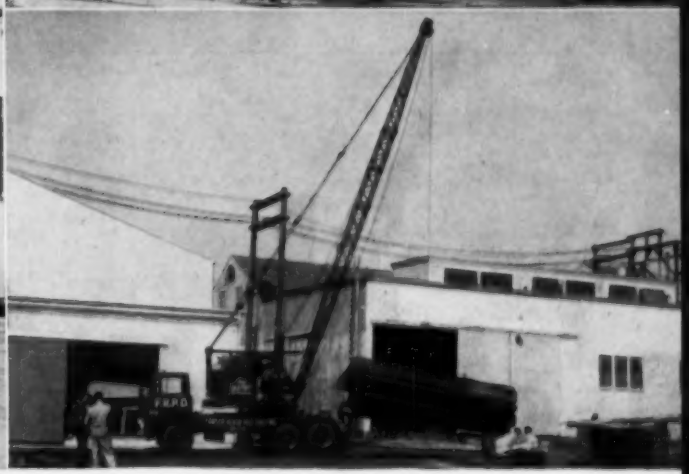

Lifting, pile-driving, cleanup . . . Canadian company's

Versatile Michigan 15-ton Truck Crane handles entire railroad trestle project ——*ALONE!*

Michigan cranes are nothing new to Fraser River Pile Driving Company, Ltd. (New Westminster, British Columbia)—they've owned eight of them. Still, there's something pretty special about being able to say "Send a Michigan" . . . knowing this *one machine alone* can handle a crane or shovel job quickly, efficiently, *profitably*. A case in point is the railroad trestle Fraser built recently for Pacific Veneer Division of Canadian Forest Products, Limited.

Drives to job at traffic speeds

To get work started with minimum delay, Fraser's 15-ton Michigan truck crane was driven in to the job over main highways. Unit was light and narrow enough to need no highway permit. Its first assignment was pile driving. A 35-foot tower was assembled to the boom end and raised into position; a 3600-pound hammer slammed dozens of pilings into place. Michigan's maneuverability really shone here, for it carried—and placed—all trestle timber and sections of pre-built bridge flooring, *as well as* the big pilings. And to finish matters, they later put a clamshell on the Michigan and cleaned up underneath the finished trestle.

"Very pleased with our 8 Michigans" says owner

It's easy to see why Fraser River Pile Driving Company has been "very pleased" with the performance of their eight Michigan Cranes. Chances are, rugged, versatile drive-anywhere units like these could cut *your* equipment headaches, too. Your local Michigan Distributor will be glad to work with you. No obligation, naturally. Or write direct to us for detailed specifications.

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4-6661

Log & Lumber Prices

(*Continued from page 92*)

$42.50 for #3's, $42.50 to $47.50 for #2's and $47.50 to $52.50 for #1's. The price of balsam pulp logs has remained steady at $35.00 to $40.00 and lumber and peeler balsam is $50.00.

• Southern Pine Prices (KD Stock)

Vertical Grain Flooring

	BB	C	D
1x4	205.00	200.00	195.00

Flat Grain Flooring

1x4	135.00	150.00	130.00
1x6	175.00	165.00	125.00

Drop Siding

1x6 No. 106	191.00	170.00	130.00
No. 116	191.00	170.00	130.00

Boards & Shiplap

	1x6	1x8	1x10	1x12
No. 1	125.00	125.00	125.00	175.00
No. 2	82.00	84.00	81.00	93.00
No. 3	68.00	70.00	71.00	68.00

No. 1 Dimension

	12	14	16	18	20
2x4	100.00	100.00	102.00	118.00	123.00
2x6	100.00	103.00	101.00	115.00	120.00
2x8	97.00	96.00	96.00	115.00	120.00
2x10	110.00	108.00	110.00	120.00	125.00
2x12	125.00	112.00	115.00	145.00	150.00

No. 2 Dimension

2x4	94.00	96.00	98.00	107.00	113.00
2x6	86.00	88.00	86.00	100.00	105.00
2x8	84.00	85.00	84.00	97.00	105.00
2x10	88.00	91.00	88.00	105.00	109.00
2x12	90.00	88.00	90.00	115.00	120.00

• Douglas Fir Plywood

¼" AD SOIS.....$70/ sq. ft.

• Red Cedar (industry standard) Shingles

Royals

No. 1	24"	4/2	$15.50
No. 2	24"	4/2	9.50- 10.50
No. 3	24"	4/2	5.00

Perfections

No. 1	18"	5/2¼	11.50
No. 2	18"	5/2¼	7.75
No. 3	18"	5/2¼	3.50

XXXXX

No. 1	16"	5/2	10.25
No. 2	16"	5/2	6.25
No. 3	16"	5/2	3.50- 4.00

• Douglas Fir Lumber Prices

1x8	Utility S4S KD	$ 48- 53.00
2x4	Construction Dimension S4S KD	84- 86.00
1x4	C&Btr VG Flooring KD	170-175.00
1x6	C&Btr Drop Siding KD	158-163.00
1x6	C&Btr S4S KD	170-175.00
1x8	C&Btr S4S KD	170-175.00
1x10	C&Btr S4S KD	170-175.00
1x12	C&Btr S4S KD	215-220.00

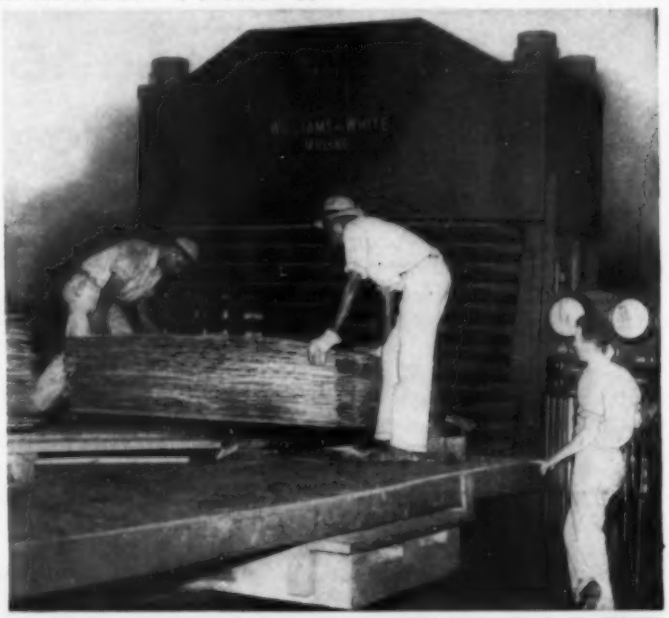
CONSTRUCTION Timbers and Plank

3x12	6x20'	$ 84- 87.00
3x12	22x24'	89- 92.00
3x12	26-32'	97-102.00
4x4	8-20'	85- 88.00
4x4	22-24'	90- 93.00
4x4	26-32'	98-103.00
6x6	8-20'	82- 85.00
6x6	22-30'	89- 92.00
6x6	32-40'	104-107.00
8x8	8-20'	81- 84.00
8x8	22-30'	86- 89.00

(*Continued on page 96*)

14 Years Continuous Production With a

WILLIAMS-WHITE Hot Plate Press



The 640-Ton Hot Plate Press illustrated has been producing plywood panels 102" x 50" since 1943 . . . a typical example of continuous production obtainable with a WILLIAMS-WHITE Hot Plate Press. Available in capacities from 50 through 5,000 tons for the production of plywood, hardboard and allied materials, each is engineered to your specifications. Take advantage of our "know how." For details write us direct or to any WILLIAMS-WHITE Representative. Ask for Bulletin 200-A.

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OHIO, Cincinnati: Columbus or Dayton: Seifreat-Elsted Mach'y Co.
Cleveland: A. L. Bechtel & Son
OREGON, Portland: Allied Northwest Mach. Tool Corp.
PENNSYLVANIA, Pittsburgh: Frank Ryman's Sons
Wynnewood (Phila.): Edw. A. Lynch Mach'y Co.
WASHINGTON, Seattle: Perine Mach'y & Supply Co.
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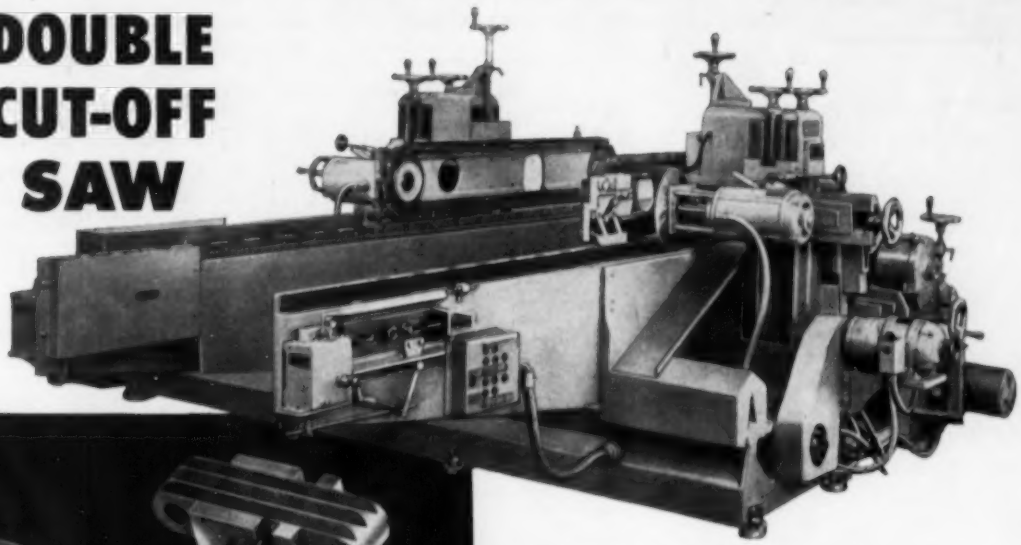
All Welded Steel Construction

on the MEREEN-JOHNSON NO. 300

DOUBLE CUT-OFF SAW



with the

MULTI-V CHAIN

This special chain is furnished on the M-J No. 300. Note the 45° angle of the three V grooves to prevent sideways movement. The inverted center link clearly illustrates the full length bearing surface in both horizontal and vertical planes. There is approximately 55% greater horizontal and 95% more vertical bearing area than with low angle single V-chain. Patented snap dogs are standard equipment.

The No. 300 is offered to meet varying working conditions. It can be equipped with regular or high speed cope motors, stationary or jump dado arbor or other accessories as required. The sturdy, welded steel construction . . . rubber block hold-downs . . . snap-on feed dogs . . . and variable feed drive are only a few of its outstanding features.

Write for the No. 300 Bulletin

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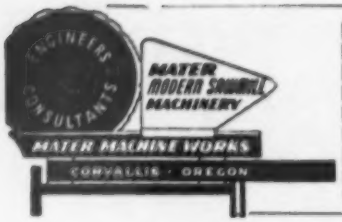
CUT-OFF SAWS | DOUBLE CUT-OFF SAWS | MULTIPLE CUT-OFF SAWS | GANG RIP SAWS

TENONERS | VENEER & PLYWOOD SIZERS & JOINTERS | RESAWS



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Save men! Cut operating costs! Increase Profit Margins! Mills of all sizes choose Mater Riderless Automatic Carriages because they are engineered for remote control. Profit by Mater's ten years of experience in manufacturing Riderless Carriages.

MATER MACHINE WORKS, INC. • Corvallis, Oregon • Phone Plaza 3-5912

Log & Lumber Prices

(*Continued from page 94*)

8x8 32-40′	101-104.00
6x10, 8x10, 10x10, 12x12— 8-20′	81- 84.00
6x10, 8x10, 10x10, 12x12—22-30′	86- 89.00
6x10, 8x10, 10x10, 12x12—32-40′	101-104.00
Crossties	58- 61.00

CONSTRUCTION Dimension (Green)

2x4 6-24′	$ 71- 74.00
2x6 6-24′	72- 85.00
2x8 6-24′	71- 74.00
2x12 6-24′	72- 75.00

STANDARD & Btr. Boards (Green)

1x4 6-20′	$ 49- 52.00
1x8 6-20′	61- 64.00
1x12 6-20′	61- 64.00

Western Pine Prices

PONDEROSA PINE

SELECTS S2 or 4S	4/4RW	5/4RW	6/4RW
C Select RL	$262.46	$266.65	$265.68
D Select RL	189.31	197.14	185.19
SHOP S2S	No. 1	No. 2	
5/4	132.51	98.48	
6/4	133.15	100.25	
COMMONS S2 or 4S	No. 2	No. 3	
1 x 8″ RL	106.10	74.54	
1 x 12″ RL	118.66	78.87	
4/4 No. 4 Common S2 or 4S	51.19		

IDAHO WHITE PINE

SELECTS S2 or 4S	4/4RW	6/4RW
Choice (C) RL	273.16	
Quality (D) RL	203.60	266.21

COMMONS S2 or 4S	Colonial No. 1	Sterling No. 2	Stand. No. 3
1 x 8″ RL		154.43	99.72
1 x 12″ RL		167.25	100.98
4/4 UTILITY (#4) S2 or 4S RW&L	59.36		

SUGAR PINE

SELECTS S2 or 4S	4/4RW	5/4RW	6/4RW
#1 & 2 Clear RL	282.35	287.44	284.03
C Select RL	273.29	277.57	273.41
D Select RL	209.48	211.32	204.59
SHOP S2S	No. 1	No. 2	No. 3
5/4	135.10	99.38	69.16
6/4	138.69	103.34	67.17
8/4	153.06	103.43	66.51

LARCH-DOUGLAS FIR

4/4 #3 Common S2 or 4S	59.35
2 x 4 #1 Dimension RW&L	80.35
2 x 4 #2 & Btr. Dimension RW&L	71.74

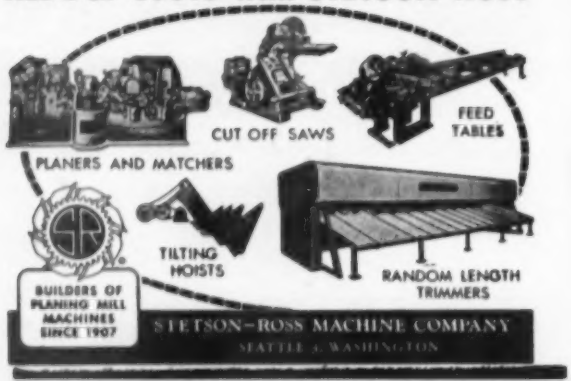
Lumber is the leading product of Oregon's forests. It currently brings in more than 68 per cent of all Oregon's forest dollars.

Union Bag-Camp Paper Names Manager

John E. Ray, III, vice-president of the Camp division of Union Bag-Camp Paper Corp., has been appointed resident manager of the company plant at Franklin, Va.

In this new capacity, Ray will be responsible for the lumber operations, woodlands, public relations and mill planning. Ray joined the company in 1945 and recently has been in charge of pulp and paper operations at Franklin. He will continue with this responsibility as well as industrial relations, plant engineering and technical departments.

REDUCE COSTS with STETSON-ROSS



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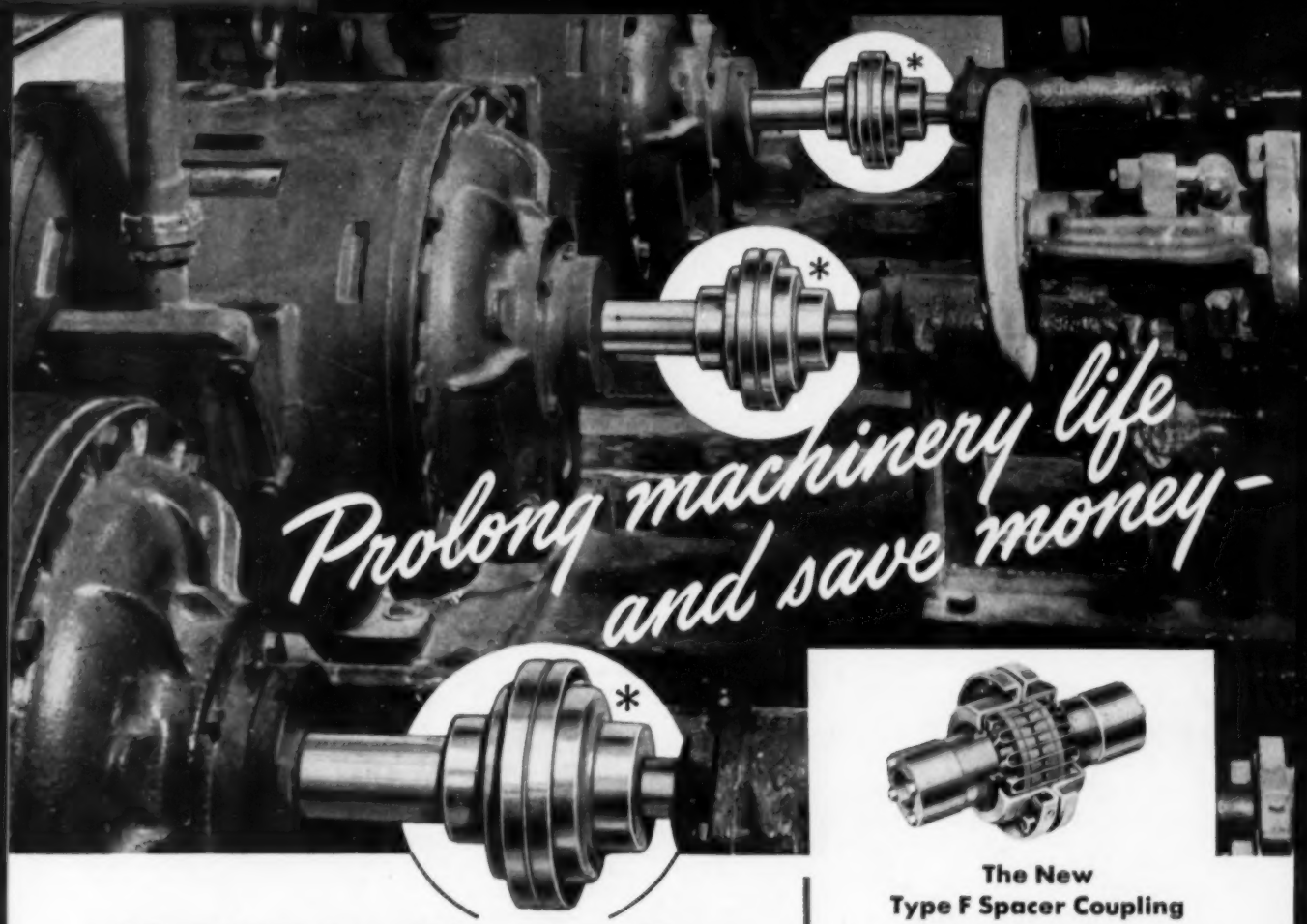

Prolong machinery life and save money—

with FALK Steelflex Couplings

Ever since the first Falk Steelflex Coupling was designed and built, we have firmly held to these beliefs:

1. A coupling, to give fullest value, must do more than merely *connect* driving and driven machinery—it must *protect* the machinery and prolong its life.

2. A coupling, to be truly flexible, must overcome the effects of shock and vibration, as well as shaft misalignment.

Proof of the soundness of those beliefs is furnished by the record. More than one million Falk Steelflex Couplings have been used on every conceivable type of industrial application . . . giving trouble-free service, providing maximum protection to connected machinery.

* A single basic type—the famous Type F—fills 90% of all industrial application needs. It is versatile, efficient and economical. And—it is always available from factory, field or distributor stocks, in a wide range of sizes.

Write to Department 247 for engineering bulletin, including selection and dimension tables.

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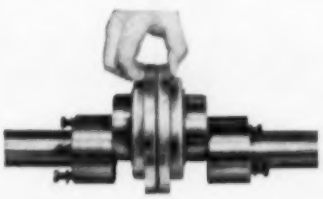
The New Type F Spacer Coupling

Here is a Steelflex coupling specially designed to permit fast, easy installation and removal in horizontal and vertical applications where it is impracticable to move the connected units—or where a space-gap (up to 12 in.) is necessary.

Like all Steelflex couplings, the Type F Spacer gives long, trouble-free service and maximum 3-way protection for connected machinery: it provides torsional resilience to reduce shock and vibration; it accommodates parallel or angular shaft misalignment; it allows free (or limited) end float.

An outstanding feature of the Steelflex Spacer is that it can be installed or removed in one piece (see photo below); no dismantling or servicing of the coupling is required. Pump assemblies can be disconnected and removed without disassembling the coupling, without exposing working parts.



The Steelflex Spacer coupling is prelubricated at the Factory and can be installed, or removed and reinstalled, without disturbing the lubricant—a highly desirable feature.

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. . . so once in a while it does happen. But by-and-large, the LUMBER people FRED E. BARNETT's boys call on are glad — GLAD — they came in, because these men are trained and experienced in cost-cutting methods of manufacturing in our field . . . and they make it their **business** to keep up on new technical ideas and machinery.

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PROGRAM PARTICIPANTS. From left, W. D. Hagenstein, Industrial Forestry Assn., Portland Ore.; Lee R. Gensman, Monarch Forge & Machine Works, Portland, Ore.; William H. Rambo W. H. Rambo Co., Portland, Ore., chairman; A. A. Osipovich, Portland, Ore.; Stephen M. Batori Controls & Communications, Eugene, Ore.; Eugene W. Fobes, U. S. Forest Products Laboratory Madison, Wis.; John M. Matuszak, Mater Machine Works, Inc., Corvallis, Ore.; N. T. Shelton Diamond Match Co., Chico, Calif.; H. A. McKeever, Weyerhaeuser Timber Co., Longview, Wash.; Conant Dodge, Weyerhaeuser Timber Company, Tacoma, Wash., who acted as moderator

Automation

(*Continued from page* 80)

and Kalispell, Montana. These units have been in operation only a short time and production figures are not yet available.

A taper coupling has been installed on one existing carriage. Its location is at Harlan, Oregon. This sawmill formerly used the tapering-blocks method of taper sawing. Production has been raised, but credit for the increase must be shared with the air-cylinder-operated flippers which were installed on the carriage at the same time.

Considerations in Plan and Design of an Integrated Forest Plant

(N. T. Shelton, Diamond Match Co., Calif. Lumber Div., Chico, Calif.)

Shelton described the new Red Bluff, Calif., plant of Diamond Match Co., which includes a large new sawmill and a pulp products plant for the making of ground wood food containers. Mr. Shelton said the company was going to produce ground wood pulp from wood chips produced as a residue from the sawmill. The wood chips will be processed by hot water in a digester and will be put through disc refiners.

It has been estimated that the sawmill cutting 90 million board feet per year will produce well over 100 units of clean chips per day.

Effluent from the plant will be a minor problem since an elaborate system of re-use of process water will be installed. A Dorr-Oliver clariflocculator will also be used. A water percolating system, to return waste water to the water table is being built and will be used if necessary.

Sawlog Barkers

(E. W. Fobes, U. S. Forest Products Laboratory, Madison, Wisconsin)

A survey of sawmill and logging operations made by the Forest Products Laboratory 10 years ago revealed no saw-log barkers in the eastern part of this country and only a few in the Northwest. These were hydraulic barkers installed at a cost that exceeded the total value of a moderately large sawmill. Early machines, however, started a trend that was responsible for the development and use of present day mechanical barkers.

The 60,000 sawmills in the U. S. produce an estimated 1.7 billion cubic feet of slabs and edgings as a by-product per year. These sawmills vary considerably in size, and the timber processed by them likewise varies in size as well as species. This situation materially affects the size, production rates, and cost of equipment required by the industry. The range in size of sawmills is shown in Table 1.

A few years ago, sawmills with an annual production of five million board feet or less were considered in a category of not being able to justify log barking equipment. Today a number of mills of this size use log barkers. Likewise, very few large mills are designing special equipment but are installing commercially available

(*Continued on page* 100)

TABLE 1. SIZE OF SAWMILLS IN UNITED STATES

Yearly Production MM Board feet	Daily Production[1] M Board feet	Hourly Production[2] M Board feet	Percent of Sawmills
0- 0.9	0-4	0- 0.5	87.52
1- 2.9	4-12	0.5- 1.5	8.70
3- 4.9	12-20	1.5- 2.5	1.32
5- 9.9	20-40	2.5- 5.	1.24
10-14.9	40-60	5- 7.5	.47
15-24.9	60-100	7.5-12.5	.36
Over 25	Over 100	Over 12.5	.39

[1] Based on 250 working days per year.
[2] Based on 1 shift of 8 hours.

In actual road tests . . .

Dodge won top honors in test after test between comparable models of all three low-priced trucks. Special high-speed camera records actual finish of hill-climb test. From a standing start, test crews raced all three trucks up a 32% grade. Dodge was *first* by five lengths.

and on your job . . .

Dodge gives you more V-8 power, in every weight class, than either of the other two low-priced trucks. From 204-hp. pick-ups to 232-hp. tandems, the extra power you get in a Dodge means an on-the-job performance bonus for you. It means greater economy, too, because it cuts down engine strain, reduces wear and repairs.

Dodge *Power Giants* outpower, outperform the "other two" low-priced makes by wide margin!

Want power? Dodge outpowers its low-priced competitors by as much as 27 percent.

Want economical performance? The advanced design of the Dodge short-stroke V-8 produces the most efficient fuel usage in the industry. You get more miles per gallon . . . full power on *regular gas.*

Want extra payload capacity and handling ease? Dodge has 'em beat on both counts.

How about it? Don't you think you should find out for yourself? Just give your Dodge dealer a ring. He'll bring a truck right to your door and he'll show you certified test results that demonstrate Dodge is a winner in actual tests and on your job.

DODGE

PowerGiants

MOST POWER OF THE LOW-PRICED 3

Automation

(*Continued from page* 98)

equipment. Thus, the number of mills in the category requiring equipment of standard design is increasing, while the number in the other two, requiring special engineering services or not being able to afford log barkers is decreasing. Present status of the industry is:

Yearly Production MM B M	Mills with Barkers Percent
0- 0.9	9
1- 2.9	0
3- 4.9	4
5- 9.9	10
10-14.9	12
15-24.9	12
Over 25	37

Approximately 71 per cent of these barker installations are in the East, and 29 per cent are in the West. More than half of all installations are in the Southeastern States. Oregon has more than any other State, followed closely by Arkansas.

The primary requirement of a hydraulic barker is an adequate water supply. Only a small percentage of the thousands of sawmills can meet this requirement. High-pressure streams of water are required, and these necessitate expensive pumps with high power requirements. These factors raise costs beyond the economic limits of all except very large sawmills.

Power requirements for the barking mechanism of mechanical barkers are roughly only one-tenth those of hydraulic barkers. Both the price of the machine and its operating cost are therefore much less. Although other factors are involved, these are the major reasons for the rapidly expanding use of mechanical barkers.

The number of cambium-shearing barkers at sawmills far exceeds the total of all other types. These machines exert tangential forces that shear the bark from the wood at the cambium layer. Standard models are available in sizes that take logs from 14 to 72 inches in maximum diameter. The minimum usable log length is less than eight feet, and since barking is continuous, there is no limit on maximum length if the conveyor system is adequate. In many cases, feed rates exceed sawmill requirements.

These machines cost from $17,000 to $70,000. Operating costs vary considerably depending upon size of timber, volume of production, and other variables. However, sawmills with an annual production as low as 8 million board feet are profitably using these machines. One southern sawmill cutting between 4,000 and 4,700 board-feet per hour has been profitably recovering chips worth $8 per thousand board-feet of lumber sawn.

The use of chain-flail barkers, particularly by smaller sawmills, is steadily increasing. These machines use chain flails to pound the bark off the logs. The quality of barking varies according to the season of the year, as with other machines, but in general it is not considered as high as that obtained with the cambium-shearing barkers. However, chip producers using these machines are having no serious difficulty meeting purchasers' requirements.

These barkers cost from $13,000 to $20,000. They are being used by sawmills cutting from two to 12 million board feet a year.

In addition to round-log barkers, an increasing number of mechanical slab barkers are being used. These are of three types, cambium shear, hammer, and chain flail. These machines cost from $5,000 to $10,000. A number of sawmills with round-log barkers have added slab barkers. Slabs are bought from surrounding small mills, thus increasing chip production. Slabs from the small percentage of logs too large for the round-log barkers are also being processed.

Forest Management and Utilization

(W. D. Hagenstein, Industrial Forestry Association, Portland, Ore.)

According to Mr. Hagenstein, the Douglas fir region's forest resource furnishes direct employment to 140,000 people whose annual payroll is $700,000,000, constitutes 30 per cent of nation's timber supply and furnishes quarter of nation's annual tim-

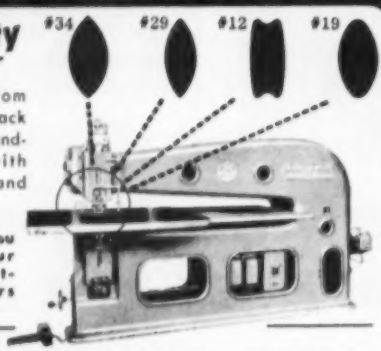
(*Continued on page* 102)

15 MIN. DIE CHANGE-OVER TIME with RAIMANN Veneer Patcher

Versatility

Change over from face patches to back core and cross banding patches with minimum time and effort.

With Raimann, you can tailor your patching department to orders coming through.



1750 PATCHES WITHOUT STOPPING
with addition of Victor Patch-Strip Loader — more than 8 times number available in competing machines.

USE 5% LESS VENEER
The #34 Die Covers 28% more area per patch than competitive makes. Reduces double patching, reduces number of patching cycles — improves quality of veneer.

FAST PARTS AND REPAIR SERVICE
3 full-time service men on road giving periodic checks to machines.

FREE. Interesting Raimann Hy-Facts folder available.

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A New Concept in Continuous Moisture Control

LAUCKS Sentry CUSTOM
CONTINUOUS MOISTURE DETECTOR

The new Custom introduces an outstanding advance in SENTRY systems for measuring and recording moisture content of moving veneer, lumber, paper and various unrelated or non-cellulose materials.

The Custom accents unitized construction with primary circuits in lightweight "plug-in" type drawers. The moisture range has been expanded from zero to fibre saturation. Moisture classification (marking) of stock is governed by a single control.

Designed primarily for larger installations, Custom models are also ideal for overseas use. Through an exchange of drawers the entire system may be serviced or expanded without delay.

SENTRIES range from single level marking units to multi-level marking, recording and counting systems and are priced from $3,950. You are cordially invited to write for detailed information.

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A leader in wood technology for 49 years

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serve our growing list

of customers

Lawson's engineering staff is dedicated to create equipment that solves the old problems with simplified design — engineering by lumbermen for lumbermen.

Lawson-engineered products continue to pace the field with simplicity of design. You gain, and should expect to gain, the advantages in labor saving with this type of equipment, but Lawson's creative engineering has made it possible to minimize maintenance through its patented, simplified, heavy-structural design. There are no complex, trouble-giving mechanisms—just well conceived, executed and practical application of sound principles.

CALL, WIRE, OR WRITE for information, technical data, illustrated literature or the services of a trained engineer. There's no obligation, of course.

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CARRIAGES
EDGERS
BURNER BLOWERS
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SWEDE PULLERS
ANTI-STAIN SPRAYERS

Automation

(*Continued from page* 100)

ber needs. Its highly integrated wood-using industry depends on tree farming for a continuing supply of raw material. Because of preponderance of Government forest ownership, public policy is the most important consideration of region's economic future.

In 1955 the region produced 9.6 billion feet of lumber, 4.4 million square feet of plywood, 2.7 million squares of shingles, 3 million doors, 3.4 million tons of wood pulp, 1.9 million tons of paper and paper board and 435 million square feet of hard, soft, particle and chip board.

These products were manufactured by a great number of wood-using plants including 843 sawmills, 29 pulp mills, 30 paper mills, 93 plywood plants, 63 veneer plants, 149 shingle mills, 17 board plants and 17 door factories. In addition, there were 1100 miscellaneous wood-using industries which produce mouldings, boxes and containers, treated products, furniture, wood flour, woodenware, cooperage, boat stock, cross arms, etc.

The value of forest products manufactured in 1955 was $1,845,000,000 or $570 for each of the region's 3¼ million people.

The region's pulp and board mills are getting 42 per cent of their raw material from slabs, edgings and trim and veneer clippings and peeler cores. The log scale equivalent of chips being used by the pulp and board mills is 1¼ billion board feet annually, free wood in the sense that it doesn't debit the region's timber inventory. There is still enough leftover wood at primary wood-using plants in the region to produce upwards of 1½ million tons of wood pulp per year.

Harry T. Nicolai

Harry T. Nicolai, president of the Nicolai Door Manufacturing Co., Portland, Ore., and an officer of several other forest products firms, died June 9 at a Portland hospital. He was 75. Mr. Nicolai, a native of Portland, entered the woodworking and lumber business with his father, the late Theodore Nicolai. In 1910 he established his own firm.

Other industry positions included president and director of the Oregon-Washington Plywood Co., Garibaldi, Ore.; president and director of Chicago Trim and Plywood Co., and a director of the St. Helens Pulp & Paper Co. He is survived by his widow, Ethel, a daughter, Mrs. Randolph Hilton, and a son, Theodore Nicolai II, all of Portland.

Metal Detector *Save Machinery!*
Stop the Accident Before It Happens
SCR-625 ARMY MINE DETECTOR

Recommended by U. S. Forestry Service and in numerous articles for finding concealed metal in logs and timber products. The Dautzier Lbr. Co., Perkinston, Miss., reports an estimated savings of $5,000 to $6,000 yearly. Write us for copy of free report of U. S. Forestry Service.

The SCR-625 is a portable instrument which may be used in the field to give an audible indication of buried metal in logs, underground, or in water. It may also be connected permanently with suitable automatic control devices for stopping machinery should imbedded metal in logs be encountered.
Detector is shipped in handy portable carrying case with instructions and ready to operate except for batteries. Ship. wt. 55 lbs. Our recent Government surplus purchase allows the present low price of $79.50 ea.
Batteries, per set—$6.27. Special price to quantity users or dealers upon request.

We maintain service and parts of the SCR-625. Parts price list on request.

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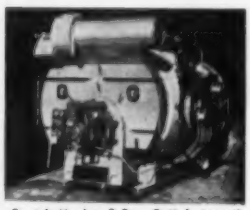
DEPENDABLE BOILERS
FOR THE LUMBER INDUSTRY

Whatever your steam requirements, investigate Gabriel All-Welded Boilers—economical, easy-to-operate without sacrificing safety factors.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...how else could you move $\frac{1}{4}$ billion feet so well?

Producing 12 million board feet of lumber plus 7½ million feet of plywood monthly, this Roseburg, Oregon mill operation is a bit too big to be typical. But they solved their problem of handling the tremendous output in a way that *is* typical of many mills and yards today.

To move more than ¼-billion feet annually through all phases of operation from receiving to delivery they standardized on Gerlinger material carriers. And bought high-stacking Gerlinger fork lift trucks to "feed" them.

Features like these made their choice of 7 Gerlinger carriers a wise investment:

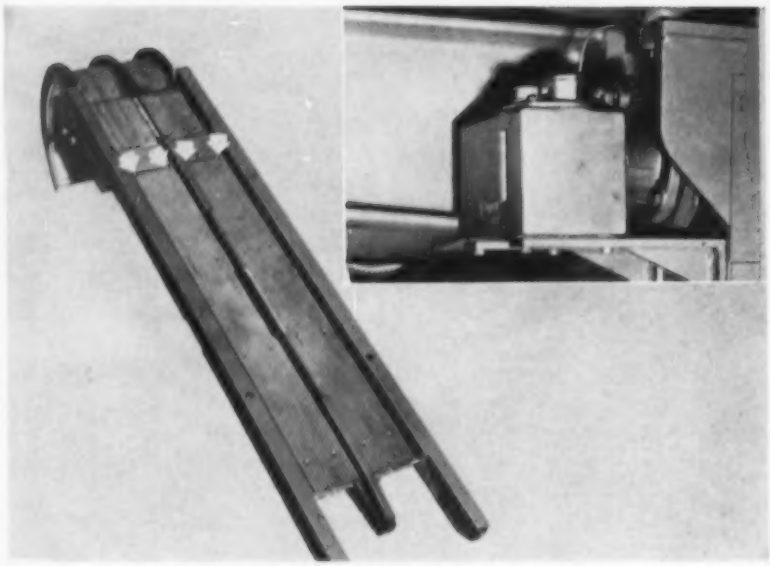
- Superior cab-to-road visibility
- 4-Speed synchromesh transmission
- All-welded structural steel frame
- Smooth-riding helical coil springs
- 4-wheel power-assist brakes
- Reserve-power overhead valve engine
- Choice of 6- to 30-ton capacities

Get more detailed information from Gerlinger Carrier Co., Dallas, Oregon.

Leaders for 38 years in building Fork Lift Trucks and Carriers

TOWMOTOR — THE ONE-MAN GANG — GERLINGER

Gerlinger Carrier Company, Dallas, Oregon, is a subsidiary of Towmotor Corporation, Cleveland, Ohio



Chain Inserts and New Lube System Extend Saw Life

DETAILS OF NEW BRASS CHAIN race inserts are shown at left. Arrows indicate four outlets for forced-feed lubrication to the race. At right is the geared pump-drive for forced-feed lubrication.

• G. M. Diehl announces two new optional features for its Model No. 750 straightline, glue joint rip saw.

Now available are brass chain race inserts and forced feed lubrication.

The brass inserts are designed to increase wear-life of the high-alloy cast feed chain, by permitting it to run in a softer, lubricated brass bed. Cost of the brass insert is a fraction of that of replacing the standard chain race assembly.

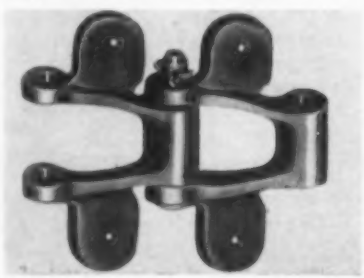
The inserts are solid 7/16" thick brass, and fit in the chain race and chain race swivel. They are jig-drilled and machined eliminating the possibility of misalignment when replacing. The inserts may also be reversed to offset uneven wear.

The forced-feed lubrication feature virtually eliminates manual oiling—cutting labor costs and giving added protection to the machine.

The brass inserts and forced-feed lubrication can be ordered on new Diehl No. 750 Rip Saws, and these machines now in use may be shipped to the factory for conversion.

Steel Conveyor Chain With Wing Attachment

Forged steel conveyor chain, each link made with a wing attachment, has been introduced by Robert A. Main & Sons, Inc., Paramus, N. J. The new pin type chain is made of forged quality steel and heat treated. It can be furnished for acid or heat conditions using corrosion or heat resistant materials. The wing attachment makes it easy to attach wood or metal conveyor slats, the manufacturer points out. The units are easy to assemble because of simple design and because they are of uniform size. Sprockets and complete conveyor aprons can be supplied using this chain.



News of Suppliers

- Promotions
- Appointments
- Plant Expansions
- Mergers & Acquisitions

HOLDEN MORRIS MILBOURN

F. W. Milbourn Heads Coe Manufacturing

F. W. Milbourn, Jr., has been elected president of Coe Manufacturing Co., succeeding his father F. W. Milbourn, Sr. who died recently. Milbourn Jr. has been vice-president and general manager for the past 10 years, has been with Coe for 23 years.

New vice-president of the firm is E. P. Morris who has headed the company's general sales activities for the past 20 years. He will continue in sales activity with the title of sales manager, and will also be closely associated with the engineering department.

Also named to a vice-presidency is Arthur S. Holden, Jr., a 20-year veteran with the firm in sales and engineering. F. S. Krag of the New York City office continues as a vice-president. J. S. Dodds, senior officer in years of service with 37, continues as secretary.

New Wire Plant

Expansion and alterations to provide facilities for a new wire drawing mill at the Leschen Wire Rope division, H. K. Porter Company, Inc., has been started and should be completed in September. The new facilities will be integrated with present wire rope manufacturing facilities. A straight-line production unit eliminating handling has been engineered for the production unit.

Spear & Jackson Opens Vancouver, B. C. Plant

Spear & Jackson, Ltd., which has been manufacturing saws since 1775 at Sheffield, England, and on the Pacific coast for the past 35 years, recently opened its big new plant in Burnaby, in the suburbs of Vancouver, B. C., to replace the one occupied by the company for many years on Granville Island. The accompanying sketch shows the general layout of the building, which cost about $750,000 and is built on property with an area of one and one-third acres. Spear & Jackson also have a factory at Eugene, Ore. Managing director Joseph E. Whitten recalls that during the gold rush days in California Spear & Jackson saws, made in Sheffield and shipped around the Horn, used to be delivered by mule team to the Motherlode country. J. B. Carswell is manager in Vancouver.

Canadian Sumner Handles Blo-R-Dry Dryer

Gram Development Co., Portland, Ore., has completed negotiations with the Canadian Sumner Iron Works, Vancouver, B. C., for manufacture and sales of the Blo-R-Dry lumber dryer in Canada. Norman Terry, president of Canadian Sumner, says a special Blo-R-Dry department will be supervised by John McKay.

Blo-R-Dry is a low temperature progressive type dry kiln developed by H. B. Gram, Portland. Its warm-air return systems gives humidity control as well as economy of operation. New automatic features eliminate the necessity of a stand-by operator.

Promoted

T. F. FLOOD has been promoted from vice pres.-production of Frank G. Hough Co. to vice pres. in charge of production, sales and manufacturing, as well as to the board of directors. He joined Hough as clerk in '45.

McCulloch Distributor

Redwood McCulloch Equipment Co., 2122 Fourth Street in Eureka, Calif., has been organized to serve as McCulloch chain saw distributor for Del Norte, Humboldt, and Mendocino counties in California, and southern Curry County in Oregon. The firm is headed by Clifton McKnight, for many years with Riley & Williams and Riley Logging Supply Co., Eureka, and previously with Caterpillar Tractor Co. The firm has 14 dealers in its area.

New Products & Services

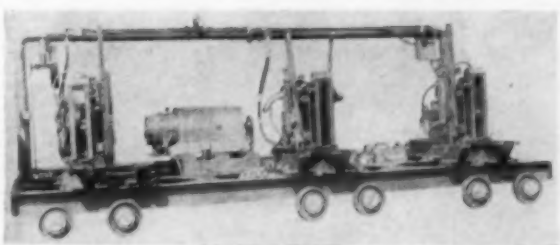
L-M Equipment Handles New Barker in West

The new Mullis Log Skinner produced by Carl W. Mullis Engineering Co., Inc., Lancaster, S. C., will be handled in the west by L-M Equipment Co., Portland, Ore., which was recently appointed western headquarters. The announcement was made by Tom Moulton, president of L-M, and Carl W. Mullis of Mullis Engineering.

The 30-inch debarker . . . up to 60-inch sizes are available . . . handles every size log from 4 to 30 inches in diameter, from eight feet to tree length. It operates on the principle of an "inner tube" . . . a rotating air-reservoir maintained at constant pressure proving constant tool pressure

against the log regardless of changing log diameters. Four self-operating, askew-angle skinning arms automatically open for log passage and remove all bark. The skinning tools are quickly removed, refaced. The push-button controlled unit debarks at the rate of 50 to 100 lineal feet a minute. It has powered bottom rolls on infeed and outfeed, hydraulic-pressure hold-down rolls. Power is from a 40-hp, 3-phase 220/440 volt, 1765 rpm electric motor.

SALEM AUTOMATIC CARRIAGE ... *with Salem Electronic Set Works*



A recent installation at General Box Distributors, Fresno, California, included a 3-head block, 66" opening, Salem Automatic Carriage with air tapers, heavy duty receding tong dogs, 3-arm carriage flippers, heavy-duty oscillating hammer dog, and bark air blower assembly. They also are using Model 820 Salem Motor Drive Feed Works, driven with a 100 hp, 1200 rpm motor.

Salem Equipment & Supply Co.
Earl R. Hitchman, Pres.
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PHONE EMpire 4-4737

Smaller Cores, More Veneer Possible With New Chuck

• No hammering is required to change plates of a new chuck developed by Humboldt Machine Works, Arcata, Calif., in conjunction with the Roddiscraft, Inc.

The design makes use of smaller chuck plates possible, resulting in smaller cores. Made of cast-alloy steel and heat treated, the plates are light and easy to handle.

Verne Allen (above) green-end foreman at Roddiscraft, demonstrates the ease with which the plates can be removed and replaced with plates of a different size. No tools are required. A twist of the wrist loosens the pointed, threaded center spike, removes locking plate and lifts off the chuck plate.

SCALE MODEL of new type Fryer dry kiln was shown during Western Dry Kiln Club meeting in Eugene, Ore., by Medford Machinery Co., Medford, Ore. It has single-blade propeller type fans, mounted overhead. Each is direct-driven by 3, 5 or 7½-hp motor, producing wind velocity up to 75 mph.

Interplant Transport Provided by Hyster

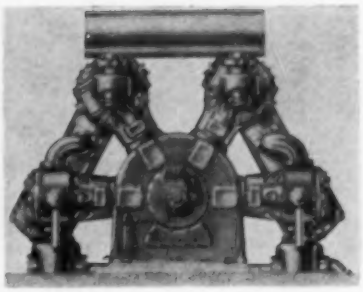
Tugster, an industrial tractor for towing of interplant trailers trains and other such work has been developed by Hyster Company, Portland, Ore. Simplified driving controls make the unit easy to operate; throttle ring is mounted within the steering wheel and the hand-operated brake control bar is forward of the operator and below the steering wheel. Steering ratios of either 1 to 1 or 3 to 1 are offered. Centrifugal clutch and automatic transmission provide smooth power flow. Travel speeds range up to 10 mph.

The Tugster is 61¼ inches long, 37¾ inches wide. It is powered by a Wisconsin air-cooled industrial Model AEN engine with 8.1-hp at 3000 rpm.

Brainard Adds Unit, Expands Strap Output

A new air-powered heavy duty strapping unit weighing only 12 pounds was recently shown off by the Brainard Steel division of Sharon Steel Corp. The firm also announced it has started a new production line for heavy duty strapping at its Warren, Ohio, plant. The new facilities will process more than 2000 tons of strapping a month.

The new strapping unit, the PNC, weighs about half as much as existing heavy-duty units, the manufacturer says. Yet, because of its air power, it achieves a high degree of tensional uniformity on steel bands. It tensions and cuts.



350 to 1000-HP Range In New Compressor

A heavy-duty industrial air compressor in the 350 to 1000 horsepower range has been developed by Joy Manufacturing, Pittsburgh, Pa. The new compressor is a 4-cylinder, double acting, water-cooled machine in semi-radial design, achieving final pressure in two stages. Output at 80 to 125 psig is rated at 2418 to 6048 cfm, depending on motor horsepower.

Three standard single models and three "Twin Unit" models are available, plus corresponding altitude sizes. Twin units consist of two standard compressors powered by one motor. Drive may be electric, flange or coupled, diesel, steam or turbo-electric combinations. The compressors are 9 feet, 8 inches high, 12 feet, 8 inches wide. Lengths vary by models, from 8 feet, 7 inches to 14 feet, 2 inches.

White Motor Buys Reo

White Motor Co. has purchased the assets of Reo Motors, Inc. and will operate it as a division with John C. Tooker as general manager. Robert F. Black, chief executive officer of White, explains that the acquisition is a logical step in the firm's expansion program aimed at broadening its markets.

I-H Turbo Engine

International Harvester Co. is now in the turbocharged engine field with its new 250-hp Turbotorque UDT-1091 power unit. Its 250 brake horsepower rating is attained at 1500 rpm. The new 6-cycle unit has all the features of its naturally-aspirated counter-part, the UD-1091.

Edgers - Trimmers
Sawmill machinery
Plywood tray systems

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Experience is our best designer

ESTABLISHED 1882

Peterbilt Model 351 Aluminum

LIGHT but RUGGED

When reduced vehicle weight becomes a serious problem in hauling maximum pay loads over public highways, Peterbilt engineers can be of real assistance to you in designing a truck that gives the lowest weight consistent with the strength of materials necessary to transport given loads. These lighter weight trucks may be constructed of all aluminum frame and cross members, axle housing and wheels, cab and all sheet metal work, or a combination of aluminum and steel, using each metal where it serves the purpose best. The Peterbilt Logging Truck shown here is the Model 351 Light Weight Heavy Duty Model, equipped with a Cummins Diesel, is owned and operated by Harold Simmons of Weott, California. Designed essentially for highway transportation, Peterbilts of this model have proven very popular with Pacific Coast loggers and lumber haulers. The next time chassis weight is of concern to you, remember that Peterbilt engineers pioneered the use of lighter alloys in motor trucks. They have the experience and will gladly share it with you.

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HEAVY DUTY TRUCKS—MACDONALD LOW BODY & LIFT TRUCKS

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There's business for hustlers, at both retail and manufacturing levels—We are hustling.

YOU'LL HEAR FROM US... our woodsmen are back cutting timber and beautiful Western Pine logs of all species are rolling to the mills.

You can be sure of High Quality Precision made products from us—Lumber, Mouldings, Millwork and Panels—*in mixed cars if you choose.*

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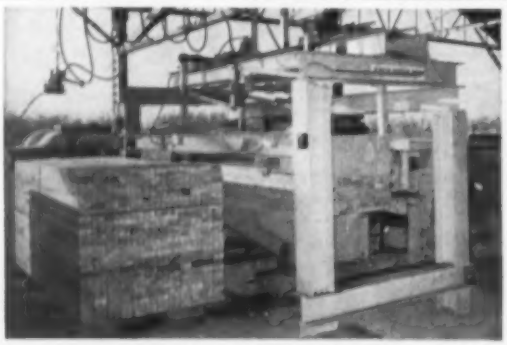
Mills at Anderson, Red Bluff, Castella, Wildwood, and Mt. Shasta, California

Sales Office at Anderson, California



New type heavy duty 2 x 4 lumber stacker now being built by I. W. JOHNSON ENGINEERING CO. Very recent installations at Athena Mill Company, Athena, Oregon; Elk Lumber Company, Medford, Oregon; and Lindsey Lumber Co., Fortuna, Calif.

FINE Sawmill Machinery

Band Mills
Rolls, Skids • Resaws
Turners, 10" and 12"
Carriages, complete
Edgers, 6"-8"-10"-12"
Niggers, 8" and 10"
Shot Gun Feeds, 8"-10"-12"-14"
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Band Saws

Spear & Jackson Bandsaws can be counted on to perform with the best. Into them go the finest steel obtainable and a quality of workmanship in welding, swaging, grinding, and tensioning, gained from years of sawmaking experience.

Spear & Jackson Bandsaws are custom-made to your exact specifications at our factory in Eugene, Oregon. Large and small operators alike are satisfied users.

SPEAR & JACKSON

EUGENE, OREGON

Band, Gang, Circular Saws, Teeth and Holders

"The Saw Without a Flaw"

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List of companies supplying Machinery, Equipment, Supplies and Services used in the Forest Industries.

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Caldwell Machinery Co., Portland, Ore.
Ledeen Mfg. Co., Los Angeles, Calif.
John M. O'Brien Co., Portland, Ore.

AIR MOTORS
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Salem Equipment & Supply Co., Salem, Ore.

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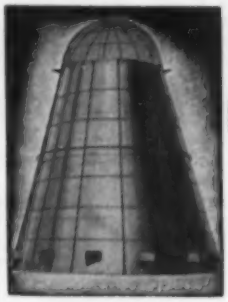

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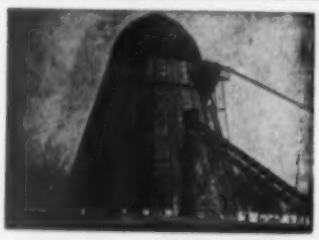
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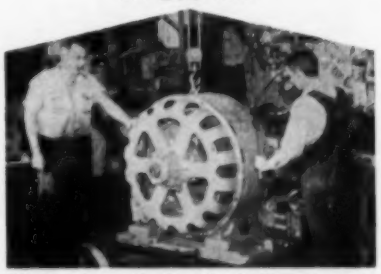
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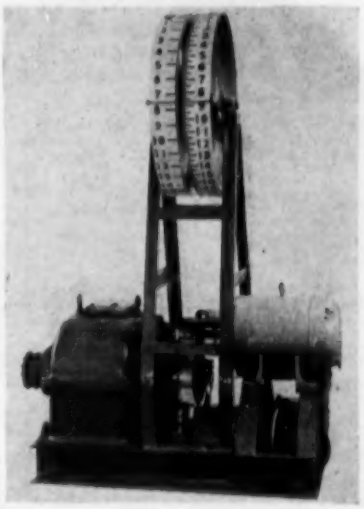

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1 3-Stage 14" FM 6920F turbine bowl pump with impellers #1203 and 125HP 1760 RPM G.E. type VHS motor with Cutler Hammer 120300 combined manual and automatic across line, Underwriter's fire pump control with 2700 amp. circuit breaker.
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12" Dia. x 26" Face
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Balata Conveyor Belts, new and used: 14", 16", 18", and 24".

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Used Smooth End Trimmer Guaranteed to be as good as new—Heavy all steel construction—Saw spacings zero, 8', 10', 12', 14', 16', 18', and 20'. Can pass 28' stock over table. Individual 5 HP Saw Arbor Motors. "No Bounce" Hold Down Shoes and the Best Dust Collecting Hood System ever. This is a real heavy duty machine that should be inspected and compared to the newest and latest.

3 Resaw Blades 24'6"x7"x18 ga. 1¾" SP Left hand used.
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Want $60,000 for 49% of new sawmill business in B. C., Canada. 50 thousand per shift, unlimited timber supply, 80% fir. Will take one investor or several to make up sixty thousand dollars. Will net $75,000 per year, after first year.

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Tract of Fir timber under 15 million feet. Write TL Box 188, c/o THE LUMBERMAN, 519 S. W. Park Avenue, Portland 5, Oregon.

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SALE OF TIMBER
YAKIMA INDIAN RESERVATION

Sealed bids, in duplicate, on forms provided therefor, marked outside "Bid, Ahtanum Ridge Unit", addressed to the Superintendent, Yakima Indian Agency, Toppenish, Washington, will be received until 1:00 P.M., Pacific Standard Time, August 28, 1957, and will be considered the equivalent of oral auction bids and posted for the information of all bidders. Oral auction bids will be received by the Superintendent, Yakima Indian Agency, beginning at 2:00 P.M. Pacific Standard Time, August 28, 1957, for the purchase of timber on a tract within the Yakima Indian Reservation described as the "Ahtanum Ridge Logging Unit". The oral auction bidding will be restricted to those who have previously submitted an acceptable sealed bid in accordance with this notice. The Unit includes approximately 2,560 acres, of which approximately 1,490 acres of ponderosa pine and mixed ponderosa pine and Douglas fir lands are to be logged. The area to be logged has a total estimated stand to be cut of approximately 8,000,000 feet B.M. of ponderosa pine and 2,000,000 feet B.M. of Douglas fir and other species, which estimate is not guaranteed, of which approximately 2,800,000 feet B.M. stands on 398 acres of timbered trust allotments for which separate approved contracts must afterwards be made with allottees desiring to sell and on terms similar to the contract for unallotted timber. Each bidder must state the price per thousand feet B.M. Scribner Decimal C Log Scale that will be paid for timber cut and scaled prior to any readjustment of rates as specified in the contract. No bid will be considered for less than $27.00 per thousand feet B.M. for ponderosa pine and $9.00 per thousand feet B.M. for Douglas fir and other species. A certified check for Twenty Thousand Dollars ($20,000.00), on a solvent bank, payable to the Bureau of Indian Affairs, must accompany each sealed bid. Persons bidding for or on behalf of companies, corporations, or partnerships must at the time of bidding submit in writing conclusive evidence of their authority to do so. The deposits of unsuccessful bidders will be returned after the successful bid has been accepted by the Area Director. The deposit of the successful bidder will be applied as part of the purchase price against timber cut on this unit only, or retained as liquidated damages if the bidder shall not execute the contract and furnish satisfactory bond for twenty thousand dollars ($20,000.00) within sixty days from acceptance of his bid. If an oral bid is declared to be high at the close of the auction, the bidder must immediately confirm the bid by submitting it in writing on a Bureau of Indian Affairs bid form. The right to waive technical defects and to reject any and all bids is reserved. The contract will specify that all designated timber shall be cut and paid for prior to April 1, 1959. Before bids are submitted, full information covering the timber, the conditions of the sale, and the submission of bids, should be obtained from the Superintendent, Yakima Indian Agency, Toppenish, Washington, or the Area Director, Bureau of Indian Affairs, P. O. Box 4007, Portland 8, Oregon.

Dated this 27th day of June, 1957, at Portland, Oregon, Perry E. Skarra, Assistant Area Director.

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Carriage, 72" screw blocks with snubbers
Feed Engine, 14" x 18", camel back
9' band mill, Allis R.H. or L.H.
10' band mill, Allis R.B. type B
Band Drive, 300 HP, 600 RPM, 3 bearing
Pony Feed, 14" x 18" direct
Pony Mill, 8' Allis R.B.
Pony Drive, 200 HP, 505 RPM, 3 bearing
Edger, 8 x 66 R.B. Prescott
Slasher, 10 saw with 75 HP motor
Trimmer, 42" Allis air with 100 HP motor
Resaw, 64" Marshon, L.H.
Bolter Saw, Mfg'd Portland Iron Works
Dresaw, 6' blade, 24" stroke
Sliding Saw, 48" circ. saw with 15 HP motor
No. 150 L Covel grinder with 72" clamp
No. 95 Covel circular saw grinder
#271 Covel band saw motorized grinder with 72" clamp and stands

PLANING MILL

No. 94 Berlin 6 x 9, 6-knife planer
16 x 20 Stetson Ross Sizer
17A1 Stetson Ross 6 x 15 all elec. planer 8 and 10 knife, 505 E feed table
Load Lifter, 5 arms, tilting break down hoist
Swede, Mfg'd by Moore
Knife Grinder, "Dependable" 99A5-36

POWER HOUSE

Turbine, 500 KW, 2300 V. Allis
Turbine, 1000 KW, 2300 V. Allis
3—200 KVA transformers, 2300/440/220 V
3—100 KVA transformers 2300/440 V
700 HP 250 lb. W.P. PSMD code boiler
Ray burner 400 HP, turbine driven

YARD EQUIPMENT

75,000 gal. water tank on tower
Stiff leg crane, 60' steel boom
Brute crane, 80' boom, 4 ton capacity
Hyster M2 carrier, 42" package
Hyster M3 carrier, 42" package
Hyster MH4564 carrier, 42" package

MISCELLANEOUS

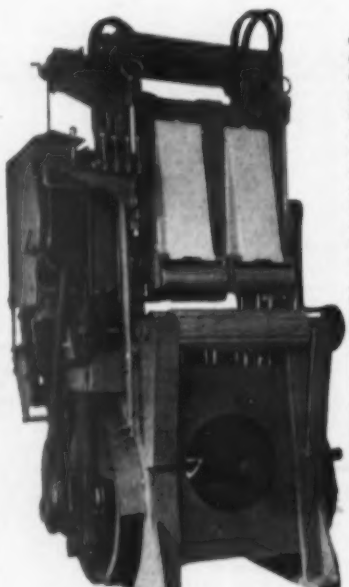
24" G & E crank pin shaper
36" x 20' bed Hamilton lathe
100 lb. Little Giant power hammer
300 lb. steam hammer
50 lb. "Modern" power hammer
860'—1⅛" strand trans. rope, new
671 GMC diesel, 200 HP
Cummins Diesel mod. HB1, 150 HP
3 shingle machines, Sumner standard
2000' H82 malleable chain

Call or write for details and prices on the above. If you don't see what you are looking for, we probably have it, but forgot to list it.

CALL or WRITE **GOLDSTEIN & BLOCH** Aberdeen, Washington

The 28-Inch MARATHON Gang Mill

Efficient assembly line production makes Marathon the largest manufacturer of gang mills in North America, with resultant LOWEST COST.



28" MARATHON Gang Saw with Divided Rolls

Note These Features:

- Four Bottom Feed Rolls
- Assembled-Ready To Operate
- Trouble Free Mechanical Feed
- Feed Speed to 32 Feet Per Minute
- SKF Roller Bearing Main Shaft
- Divided Top Rolls for Cants
- Both Gates Swing
- Manufactured in The Northwest
- Strong Rugged Construction
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- No Parts Problem
- Built To American Standards
- Prompt Delivery

The 28-Inch Series Cant Gang Mill
14" x 28" Opening

With divided top rolls, double bottom feed rolls (2 in and 2 out), variable feed works, 16 sets hangers, wedges and spacers. **$13,750** FOB, Portland, Ore.

The 28-Inch Series Log or Cant Gang
28" x 28" Opening

With double-acting variable feed works, built-in anti-friction countershaft, lubricating system, 16 sets hangers, wedges and spacers. **$13,250** FOB, Portland, Ore.

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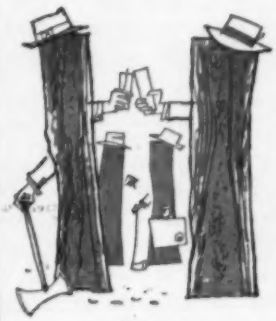

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EQUIPMENT FOR SALE

PLANERS, MOULDERS, SURFACERS

1—Newman 12" all electric Moulder, 4 head
1—Yates 91 6-knife Planer, 6 x 15
1—77A American 6 x 15 ten knife planer, ball bearing
1—Woods 4048 6 x 15 8-knife planer
1—S. A. Woods #131 8" Moulder
1—American #112 Surfacer 24"

CARRIERS & LIFT TRUCKS

1—Ross 19HT Lift Truck, 10' lift, 6000 lb. capacity, reconditioned
1—Ross 70-6045 Carrier, reconditioned

MISCELLANEOUS

1—Berlin 341 54" Resaw
1—Marshon 54" Vertical resaw
1—American 54" Vertical resaw
1—Motorized Turner Twin Resaw
1—Motorized Marshon Twin Resaw
2—Irvington Hill Cut-off Saws
1—Klamath 6 ft. R.H. Band Mill, ball bearing
1—16 ft. carriage 3 block 48" opening, roller bearing
1—All steel carriage 44" head block, three block, predetermined electric set.
1—Clyde Iron Works Double Drum Donkey Log Loader with Ford Industrial Motor complete with V belt drive.
1—No. 45 Ball bearing Diamond Hog
1—Steel Circular saw hunk 54" saw

Good Selection of Used Induction and Gear Motors

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New General Machinery Company Knife Balancing Scales in stock.

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BUYERS GUIDE and CLASSIFIED SECTION

Be sure to read the latest FOREST INDUSTRIES NEWS section in each issue of THE LUMBERMAN.

"Good Used Machinery Values"

1—54" Marshon Vertical BB Band Resaw, motors, starters & disconnects.
1—88, 6" x 20" Newman 4K Bd Hd planer
1—30HP, 40" Archer Blower, pipe & cyclone
1—45 C.F.M. Quincy Compressor
1—300 Amp Hobart-Chrysler Portable Welder

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Galland - Henning Nopak Cylinders & Valves
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Johnson Manufacturing Co.
"Seattle" Gant Gangs
"Seattle" Thin Lumber Gangs 3/16" & thinner

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2—1 HP, 59 R.P.M. ACEC - Winsmith Worm
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1—2 HP, 12.3 R.P.M. Master Worm
1—3 HP, 45 R.P.M. Master Spur T.E.F.C.
1—3 HP, 155 R.P.M. Master Spur T.E.F.C.
1—3 HP 240 R.P.M. Master Spur T.E.F.C.
1—7½ HP, 45 R.P.M. Sterling Spur
1—1 HP, 1800 R.P.M. Resond. Howell
1—2 HP, 1800 R.P.M. Resond. Century
1—10 HP, 1200 R.P.M. Resond. G.-E.
1—40 HP, 1800 R.P.M. Resond. G.-E.
1—150 HP, 1200 R.P.M. Resond. A.C.BB.

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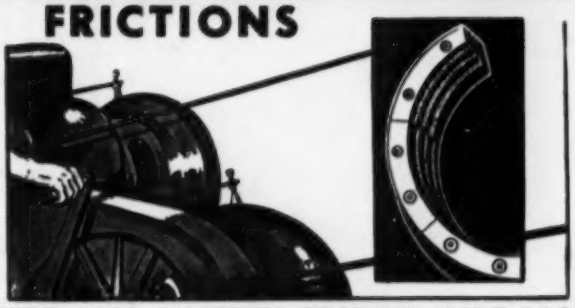

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#545 Greenlee d.s. tenoners, 8' and 21', elec., late
49" Yates 8-drum sander, motor driven
52" Turner twin r.h. band resaw, 50 HP
15" Stetson-Ross 6 - 12 - A1 planer - matcher, double profile, 12-h., all electric, 800 fpm
15" Stetson-Ross 6 - 10 - A1 planer - matcher, double profile, electric, 8-knife
15" 77A American P&M, belted, with feed table
15" Woods 415M P&M, elec., 10-h., dble. profile
50 x 98" high freq. extra heavy duty edge glazer
8 x 32" Wickes gang saw
16 x 48" Diamond gang saw
12" Vonnegut all elec. moulder, heads, hoods
12" Hermance h.h. moulder, h.d., 25 HP, starter, heads. Also one 8" size
12" Y-A C-55 4-head electric moulder
6" Yates C-89 electric moulder

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All Machinery and Equipment Formerly Used by Burke Millwork Company, Seattle $265,000.00 Worth of Equipment for Manufacture of Sash, Doors, Frames, Mouldings, Cabinets, Precut or Prefabricated Buildings

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by CLYDE P. CARROLL

MACHINERY CO.,

FOR NEW AND USED

Sawmill and Planing Mill Equipment

HEAD RIGS

1 8' Wheland roller bearing—R.H.; motorized strain and motorized lift.
1 6' Yates-American anti-friction bearing, L.H.
1 9' Allis babbit bearing band mill
1 9' Allis roller bearing band mill
1 9' Filer & Stowell babbitt bearing band mill

Steel circular husks with top and bottom ball bearing arbors, chipper arbors complete with saws and belts. Several spare circular saw arbors, various sizes.

CARRIAGES

1 Monarch 4-block, steel frame, 66" opening, air dogs, electric taper attach., electric setworks
1 3-block, 72" opening, screw type electric set, steel frame
1 4-block, 60" opening, screw type, Johnson No. 5 electric set, timber frame
1 3-block, 42" opening, roller chain type, Electroset setworks, timber frame.
44" rack and pinion blocks
48" rack and pinion blocks
48" screw blocks
72" screw blocks
Allis No. 3 electric drive
Allis No. 4 electric drive
Andrus electric drive with column and dial
Andrus setworks light pattern for gas or electric drive
Assorted locks, setworks and other parts necessary for building carriage

EDGERS—Table Type

1 4x32 Wheland, with steel tables
1 4x36 Tower, 3-saw, wood tables
1 5x42 Tower, 4 saw, with tables, NEW

EDGERS—Stub Type

1 Fabricated 4x30, 2-saw.
1 Portland Iron Works 4x30, 3-saw.
1 Fabricated 4x32, 4-saw.
1 Portland Iron Works 4x36, 4-saw.
1 Albany 4x42, 4-saw.
1 Tower 6x32, 2-saw.
1 Salem 6x40, 6-saw—3 gang, 3 moveable, new.
1 Albany 6x48, 5-saw.
1 Sumner 8x60, 5-saw.
1 Portland Iron Works 12x60, 6-saw.

SPECIALS NOW IN STOCK

PLANING MILL EQUIPMENT

Large stock good used heads, Disston, Jones & Orth, and Philbrick.

MOULDERS

1 Yates C4—8"—5 head motorized
1 Levi Huston 4x9 4-head, babbit bearing
1 Woods No. 702B 6x15 5-head, babbitt bearing
1 Berlin No. 108 6"x12" 4-head machine, 6-K top, 4-K bottom, 6-K sideheads, belt driven
1 Bamford Premier 6"x4", 6-K, motorized.
1 Smithway 6" XL, motorized.

PLANERS

Woods No. 404C, 6"x24", 8-knife with splitter, motorized ball bearing sideheads
1 Berlin No. 94X, 6x15, 6-knife round heads
1 Woods 404B, 6"x15" 8-K with motors and feed table
1 Stetson-Ross 4A4 16"x20" 6-K belt drive with steel frame feed table
1 Yates No. A4 6x30 6-knife, round heads
1 Woods No. 404 6x15 8-knife, with top and bottom profiles
1 Woods No. 10 12x30 4-knife, square heads
1 Berlin No. 41 14x30 4-knife, square heads
1 Berlin No. 10, 10x20, 4-knife
1 Stetson-Ross No. 4A4 24x30 4-knife, round head, motorized side heads
1 Yates A-1, 8"x15", 4-K round T & B.

HANDLING EQUIPMENT

1 ¼-yd. Quick-Way Crane mounted on GMC 2½-ton truck with back hoe and 30' crane boom — reconditioned.
3 Hyster 54" carriers
2 Hyster 42" carriers
2 Hyster Space Saver lift trucks, Model YT4
1 Shurman Model DDH50 with Ford V-8 power plant, factory unit
1 Star hammerhead gantry crane, 70-ft. boom, 4-ton lumber handling type
1 Gerlinger carrier, 42" pkg.
1 Ross Model 70 rebuilt
2 Yale, Model KM4L, 4,000 lb., battery operated
1 Hyster RT150 lift truck, 15000.

POWERHOUSE EQUIPMENT

1 only Westinghouse 1500-kva 2400-volt steam turbine

RESAWS

1 Mershon 66", L.H.
1 Berlin H6 horizontal with divided infeed and outfeed bed, hydraulic lift
2 Clement 54", feed roll type, left hand
1 Berlin 64", lever set, left hand
1 New Carroll circular, 34" blade, 16x12 opening
1 Berlin 54" L.H. ball brg. overhead flex shaft feed roll drive
1 Berlin No. 260, circular.

POND & DECK SAWS

2 S & W Master drag saws, 30" stroke with 10' blades, elec. motor or gas engine drive

We have other units available, write for description.

SURFACERS

1 American No. 4½ 7"x30", single.
1 American No. 444 8x36 3-knife round motorized, single.
1 Smith 8x24, single.

HOGS & CHIPPERS

1 Diamond No. 25
1 Phoenix No. 36
1 Hesse 64" BB, chipper

AIR COMPRESSORS

Brunner—10 CFM, V belt drive to 2 H.P. motor with Code tank, new.
Brunner—25 CFM, V belt drive to 5 H.P. motor with Code tank, new.
Gardner Denver Model WBG 315 CFM, V belt drive, used.
Ingersoll Rand Model 75—387 CFM, V Belt drive, used.
Ingersoll Rand—Model 90—515 CFM, V belt drive, used.
Clayton—Cross Compound—465 CFM with unloader — flat belt drive, used.

EVERYTHING FOR planing mill and sawmill

Diesel Engines • Filing Room Equipment • Electric Motors • Pumps • Deck Machinery • Transfers • Conveyors • Rolls • Shafting • Bearings • Pulleys • Chain — All Type

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17A1 Stetson Ross 15 x 6, 10 knife all electric planer with 505 E ball bearing feed table. Lots of extra motors, gears, side heads.

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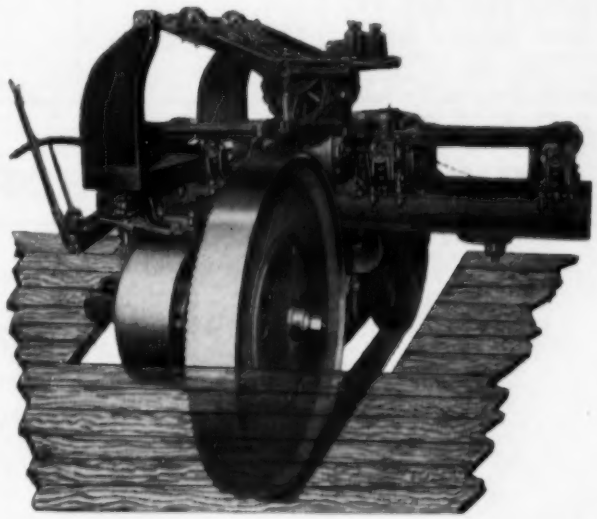

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WEIGHT: Approx. 18,000 lbs.

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SAW BLADES: Longest length 39 ft. 10 in.—Shortest length 38 ft. Width 10 in.—16-gauge saw—Tooth spacing 1¾ in.

SETWORKS: Lever setworks operated by power.

SAW GUIDES: Roller guides or crowding rolls.

SAW WHEELS: 6 ft. diameter with weldless steel rims.

FEED ROLLS: Top rolls sectional, 9 in. diam. x 4½ in. face—Bottom rolls solid, 8 in. diam. x 36 in. long.

STRAINING DEVICE: Knife edge.

RATES OF FEED: 110 ft. to 220 ft. per minute.

CAPACITY: 100 M ft. per 8 hrs. Center saw stock from 1 to 8 in. thick.

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Phone, wire or write us today.

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Used 4" x 30" Enterprise 3 saw table edger
Used 4" x 32" Wheland 3 saw BB table edger
Used 4" x 32" American 3 saw stub edger
Used 4" x 36" Newport BB table edger
Used 4" x 42" Newport BB stub edger
Used 6" x 30" Heaps stub edger
Used 6" x 42" Norton 4 gang stub edger
New 6" x 54" Soherman—Latest Model
Used 6" x 60" LH table edger BB
Used 6" x 60" Salem late gang edger—Divided Rolls
Used 8" x 48" Evergreen BB dbbl roll stub edger
Used 8" x 60" Allis LH roller brg. stub edger
Used 8" x 60" Grays Harbor anti-friction edger
Used 12" x 72" Sumner, split rolls—200 h.p. motor
Used 12" x 84" Sumner Edger

HOGS AND CHIPPERS
New Diamond No. 25 hog
New Diamond No. 135 hog
New Diamond No. 145 hog
New Diamond No. 165 hog
Used No. 35 Diamond Hog
Used No. 38 Diamond Hog
Used No. 35 Puget Sound Hog
Used No. 40 Diamond Hog
Used No. 45 Diamond hog
Used No. 45 Puget Sound BB hog.
Used No. 35 Diamond Chipmill, roller bearing
New No. 145 Diamond Chipmill, roller bearing
New 48" Chipmaster for slabs, roller bearing
Used 66" Sumner Chipper—roller bearing
Used 64" Hoose-Ersted 4-knife BB Chipper
Used 72" 3-knife chipper—Bargain Price

PLANERS—MOULDERS—SURFACERS
Used 500 Newman 6 x 14 6 knife planer—Like New!
Used 12 American 12 x 20 Sizer 6 knife BB with all auxiliary equipment
Used 404DM Sawoods 6 x 15 8 knife elect. planer
Used 17-A-1 Stetson Hess 6 x 15 10 knife elect. planer
Used 77A American 6 x 15 -8 knife BB planer
Used 608 S. A. Woods 6 x 24 8 knife planer
Used 99 Newman 6 x 15 6 knife planer
New 88 Marathon 4 x 13 4 knife BB planer
Used 100 Heaps 5 x 15 BB pony planer
Used 10 Yates 10 x 30 4 knife sizer
Used 4" Easlefield H. frequency moulder
Used 4"xL Smithway elect. moulder
Used 4" Bomford Premier elect. moulder
Used 969 Fay & Egan elect. moulder matcher
Used CBB Yates-American moulder
Used 8 x 36 Whitney single surfacer
Used 5 x 25 Hermance single surfacer

RESAWS & RIP SAWS
Used 54" Marshon, anti-friction brg. tilt rolls
Used 54" Berlin resaw, screw set
Used 36" No. 2 Fay & Egan BB circular resaw
Used 42" J. A. Fay & Egan band rip saw
Used 42" Cordemman band resaw
Used 40" No. 4 Band scroll resaw
Used 6 B-6 Yates 72" horizontal band resaw
Used No. V-6 Yates 72" heavy duty band resaw
Used 84" Marshon resaw, sawmill type, quick set
American No. 2 self-feed circular rip saw
Used No. 0 American rip saw
American Circular Resaw

NEW AND USED PUMPS
New 6 x 4 x 6 Worthington Duplex boiler feed
Used Worthington 4" Centrifugal—1000 GPM
Underwriter approved Firepumps—many sizes
Boiler water feed pumps—New & Used
Used 5" x 6" Fairbanks Centrifugal pump—500 GPM
Used 12" x 12" Westinghouse Centrifugal pump — 3000 GPM
Used 8" Jeanesville 2 stage Centrifugal pump—2000 GPM

COMPRESSORS
33 cu. ft. New Worthington air cooled
43 cu. ft. New Worthington air cooled
65 cu. ft. New Worthington air cooled
122 cu. ft. Used Worthington air cooled
194 cu. ft. New Worthington air cooled
198 cu. ft. Used Sullivan air cooled
311 cu. ft. Used Ingersoll Rand water cooled
324 cu. ft. Used Ingersoll Rand water cooled
465 cu. ft. New Worthington water cooled
500 cu. ft. Used Worthington water cooled
500 cu. ft. Used Ingersoll Rand water cooled
600 cu. ft. Used Jaeger air cooled

HOISTS AND CRANES
Used single drum 6" x 15" spool
Used 5 ton Hoose Ersted single drum hoist—like new
Used American dbl. drum 24 x 24, 40 HP
New Budgit hoists in stocks
2 ton and 5 ton hand winches in stock

SHOP TOOLS
Used Oster pipe & bolt threader
Radial drill
American radial drill
8 x 16 Reeves hydraulic hack saw
Kompsmith geared Maximaster
10 x 36 quick change lathe

MISCELLANEOUS
Used Stetson Resa 54" swing saw—BB
Used Hoose-Ersted 6 HP motorized saw arbor
American Columbia 48" oscillating 3 drum sander
Used Irvington 60" arm swing saw
Berlin 30" 3 drum sander
Used Morgan Box board matcher
Hoosier Johnson 20" precision trim & printer
36" Crescent ball bearing band saw
Used Yates 36"—3 drum sander

FEED WORKS
New Gardner Hydraulic Shotgun Feed—on order
Used Wheland 5" belt feed
Used 5 x 6 SpeeDee Twin feed
Used 16 x 18 Allis steam twin feed, self-contained
Used 3" hydraulic shotgun

LOG AND CANT GANGS
Used 28" Webrhahn Log Gang, air carriage
Used 28" Sanbo log gang, air carriage
Used 34" Mill Engineering log gang, air carriage
Used 48" Wicks cant gang
Used 20" Marathon cant gang, like new
New 20" Marathon cant gang
New 20" Marathon for logs or cants
New 28" Marathon No. 300 for logs and cants
New 28" Marathon No. 400 divided roll cant gang
New 28" Linck gang saw

FILING ROOM EQUIPMENT
New Armstrong No. 4 Stretcher Roll
New Armstrong No. 4 Band Saw Grinder
New Armstrong No. 54 Circular Saw Gummer
Used Armstrong No. 6 Band Saw Grinder
Used Armstrong No. 16 Circular Saw Grinder
New Marathon Gang Saw Grinder
Used Covel No. 140 automatic Band Saw Grinder
Used Covel No. 83 24" Gang Saw Grinder
Used Covel No. 217 RH Band Saw Grinder
Used Covel No. 90 LH Band Saw Grinder
Used Covel No. 150 RH Band Saw Grinder
Used Covel No. 109 Stretcher Roll 16" capacity
Used Hanchett No. 250 LH Band Saw Grinder
Used Hanchett No. 948 Circular Saw Grinder
Used Hanchett No. 724 36" auto. circular Saw Grinder
Used 12" Welding Clamp

KNIFE GRINDERS
Used 36" Fay & Egan No. 253 automatic knife grinder
Used American 30" knife grinder
Used American 32" straight wheel knife grinder
New Dependable No. 99A5 36" motor drive, automatic knife grinder
New Dependable No. 101A sidehead grinder
New Defiance 38" motorized automatic knife grinder
Used Dependable 101A side head grinder
Used Berlin 275—36" Automatic knife grinder
Used Dependable 36" knife grinder, cup wheel
Used Hanchett 36" knife grinder, cup wheel

MILL EQUIPMENT
Used BoGe Hydraulic log turner
Used Corolth 1 man, 2 saw trimmer, 8' to 20'
New Wheland 1 man 2 saw trimmer, elect. shift
Used 2-arm Log Stop & Loader, 36" arm, 12 x 16 cyl.
Used 3-arm Log Stop & Loader, 42" arm, 16 x 20 cyl.
Used 20' Portland Iron Log Turner
4—Used Gerlinger Carriers 42"
New Willamette Iron Sawmill, Swede
Steel Deck with flippers
Used 10" x 12" full oscillating Nigger
Used 6" x 8" full oscillating Nigger for air
Used 40" x 40" Sawmill Burner—Bolted Sections

HEAD RIGS AND CARRIAGES
Used 6' Union Iron Works band mill
Used 54' Allis Chalmers Band Headrig—anti-friction
6' Yates band mill, all cast, LH
Used 8' MacDonough headmill
Used Monarch 3-block carriage, Andrus set
Used 16', 3-block 56" opening steel carriage
Used 18' Monarch 3-block 54" opening steel carriage
Used 14' International 3-block 52" opening steel carriage
Used 18' fabricated 3-block 60" opening steel carriage
Used 8' fabricated 3-block 32" opening steel carriage

LARGE MOTORS
Used 300 HP, 1200 RPM BB Fairbanks Morse
Used 300 HP, 600 RPM GE Slip Ring & Control
Used 250 HP, 600 RPM, West. Slip Ring & Control
Used 200 HP, 1200 RPM SB General Electric
Used 200 HP, 720 RPM SB General Electric
Used 150 HP, 720 RPM SB General Electric
Used 150 HP, 720 RPM SB Westinghouse
New 150 HP, 1200 RPM BB Allis-Chalmers
Used 100 HP, 1800 RPM BB Westinghouse
New 100 HP, 1200 RPM BB Allis-Chalmers
Used 100 HP, 1200 RPM SB Allis-Chalmers
Used 100 HP, 900 RPM SB General Electric
Used 100 HP, 900 RPM SB Fairbanks Morse
Used 100 HP, 720 RPM SB General Electric
Used 75 HP, 1800 RPM SB General Electric
Used 75 HP, 1200 RPM SB Allis-Chalmers
Used 75 HP, 1200 RPM SB Allis-Chalmers
Used 75 HP, 1200 RPM SB General Electric
Used 75 HP, 720 RPM SB Allis-Chalmers
Used 75 HP, 720 RPM, SB General Electric
PLUS MANY, MANY MORE

Agents for DIAMOND IRON WORKS—Foot Rests and Chipmills. GARDNER—Hydraulic Carriage Feed & Log Deck. SCHURMAN MACHINE WORKS — Edgers, Hoist. WORTHINGTON CORPORATION—Compressors and Pumps. WHELAND COMPANY—Band Mills, Circular Sawmills, Edgers, Trimmers, Carriages. IRVINGTON—Trim Saws. ARMSTRONG MFG.—Filing Room Equipment. DEPENDABLE—Knife Grinding Equipment and Moulders. ALLIS-CHALMERS MFG.—Motors, Controls, Drives. COMET—Radial Arm Saws. DAVIS & WELLS—Woodworking Machinery. BEGE — Hydraulic Log Turners. P&H—Hoist. BINKS MFG. — Spray Equipment. MARATHON—AND LINCK GANG MILLS. DELTA—Power Tools.

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"When You Think of Machinery, Think of Portland Machinery"

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The LUMBERMAN'S Advertising Index for July 12, 1957

These advertisers BELIEVE in the forest industries and are well prepared to serve you.

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While every precaution is taken to insure accuracy, we cannot guarantee against the possibility of an occasional change or omission in preparation of this index.

News of Suppliers

New Atkins Managers

TWO IMPORTANT division manager posts have been filled by Atkins Saw Division. **A. W. Roark** (L) is the new manager at Portland, where he will headquarter and supervise saw sales in 11 western states. For the past five years he has been sales manager with Northwest Loggers Supply, a McCulloch chain saw distributor. Before that he was with Atkins for 23 years in several capacities. **Edwin L. Frick, Jr.** (r), has been named manager of the Industrial Eastern Division, which includes the Middle Atlantic and New England states. Mr. Frick comes from the Henry Disston Division, where he has been eastern district sales manager for the past 1½ years.

Advanced to Higher Posts

TWO EXECUTIVE PROMOTIONS have been made in the Industrial Truck Division of Clark Equipment Co. **L. A. De Polis,** general sales manager, is now director of sales. **Bart E. Phillips** (r), a previous assistant sales manager, has been made sales manager. Mr. De Polis was at one time sales manager for Ross Carrier Co., which joined Clark in 1953. Mr. Phillips has been with Clark for 10 years.

Stanley Opens Plant

Stanley Steel Strapping, a division of The Stanley Works, has opened a new steel strapping factory and office building at New Britain, Conn. The new office facilities contain 60,000 square feet of space, the manufacturing plant 100,000 square feet. Harrison C. Bristoll, vice-president of The Stanley Works in charge of steel strapping, explains that steel strapping sales have doubled in volume at intervals of five years for the last three decades and it is expected that the new facilities will be utilized fully over a five-year period and additional ones will be required at the end of that period.

New Mgr.

IRVING H. McGINNIS is the new manager of the Air-Mac, Inc. branch in Spokane, Wash. He has held previous positions as service manager and sales manager. Air-Mac handles P&H, Gelinger, Towmotor.

New Job

ALBERT E. STEVENS is Standard of California's new manager of the wholesale distributor division. In his new job he will work closely with the lumber industry on the west coast.

DuBrucq Re-Elected

Ray C. DuBrucq, Rockwell Manufacturing Co., has been re-elected president of the Woodworking Machinery Manufacturers' Association. Other officers include Leslie H. Geddes, Greenlee Bros. & Co., vice-president; E. J. Bell, Jr., The Bell Machine Co., secretary; and F. G. Walker, Jones Superior Machine Co., treasurer.

PARA-FLEX, the new flexible cushion coupling was introduced to the West recently at a showing in San Francisco conducted by Dodge Manufacturing Corp., Mishawaka, Ind. Participating were, L to R: Fred Ebeling, general sales manager; Garth Stroup, manager distributor sales; Harry A. Torson, vice-president sales; Ralph Hanes, advertising sales promotion manager; and Lee Carroll, Pacific Coast manager.

Yours For The Asking

SUPPLIERS TO FOREST industries are constantly coming up with new and interesting literature describing their products and services. This material is offered free to our readers. Just drop a card or letter to the supplier mentioned. There is no cost or obligation. — Ed.

• ***Using Round Heads, Slotted Knives.*** Bulletin No. 400 describes the use and application of round heads and slotted knives, illustrated standards types of square heads and attachments. Available from Wisconsin Knife Works, Box 869, Beloit, Wis.

• ***Using Ford Tractors.*** A 12-page booklet has been prepared on the industrial application of Ford tractors. Abbreviated specifications on all equipment are included. Copies are available from Industrial Sales Department, Tractor and Implement division, Ford Motor Co., 2500 E. Maple Road, Birmingham, Mich.

• ***Driver Manual.*** Revised issues of the driver manual prepared by White Motor Co. for use of truck owners, fleet superintendents and drivers is now available for $1.50. Copies are available from the sales promotion department, The White Motor Co., Cleveland 1, Ohio.

• ***Automatic Round Steel Strapping Machines.*** Literature describing the USS Gerrard Model 12 automatic round steel strapping machine, available in two sizes . . . large opening and standard openings . . . is now available. Construction features and operational detail are included. Copies free from Gerrard Steel Strapping division, United States Steel Corp., 2915 West 47th Street, Chicago 32, Ill.

• ***Micro Switches.*** It's line of micro switches . . . basic units, rotary selectors, pushbuttons, toggles and door interlocks . . . is described in a new booklet available from Micro Switch, a division of Minneapolis-Honeywell Regulator Co., Freeport, Ill.

• ***Clark Truck Line.*** Fork lift trucks, straddle carriers, powered hand trucks and towing tractors produced by the Industrial Truck division of Clark Equipment Co. are available from the division at Battle Creek, Mich.

• ***Carbide Knives.*** Bulletin WK-100 reports on the results of studies conducted on the performance of carbide knives used in various woodworking operations. Copies from Kennametal, Inc., Latrobe, Pa.

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give positive, low-cost grass and weed control

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For grasses, cattails and Phragmites

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